

Attorney Docket No. 9400-63

IFW
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Huslak et al.

Application Serial No.: 10/756,784

Filed: January 13, 2004

For: **VIDEOCONFERENCING USING MANAGED QUALITY OF SERVICE
AND/OR BANDWIDTH ALLOCATION IN A REGIONAL/ACCESS NETWORK
(RAN)**

Examiner: Unknown

Group Art Unit: 2643

Confirmation No.: 2875

Date : June 4, 2004

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUBMITTAL OF FORMAL DRAWINGS

Sir:

There is enclosed herewith one set (37 sheets) of new formal drawings. It is requested that these new drawings be substituted for the originally filed informal drawings.

If any extension of time for the accompanying response or submission is required, Applicant requests that this be considered a petition therefor. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to our Deposit Account No. 50-0220.

Respectfully submitted,

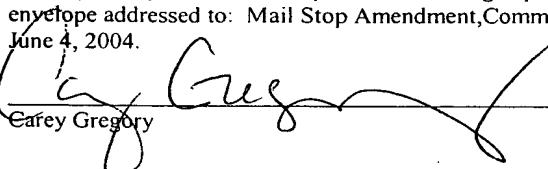


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CERTIFICATE OF MAILING UNDER 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 4, 2004.



Carye Gregory

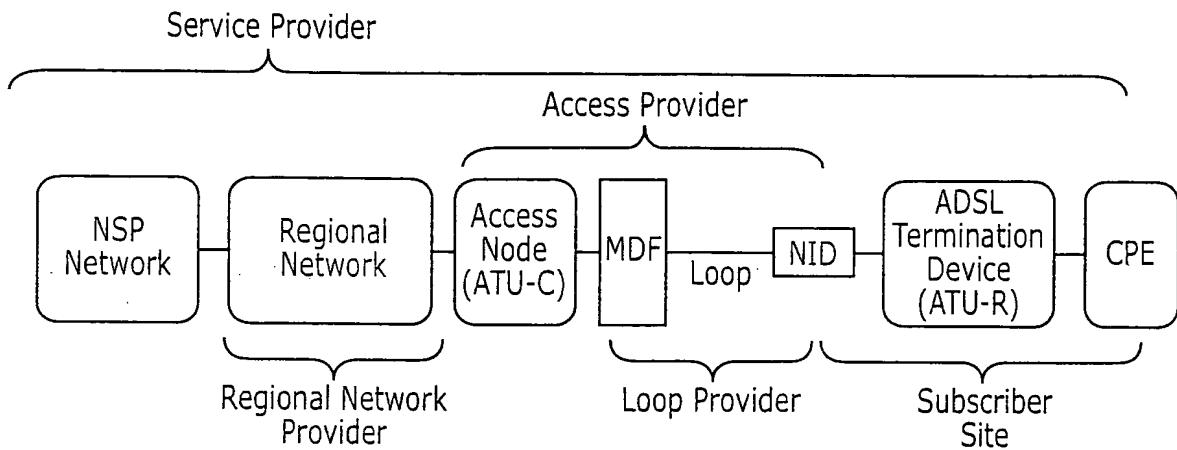


FIGURE 1
(PRIOR ART)

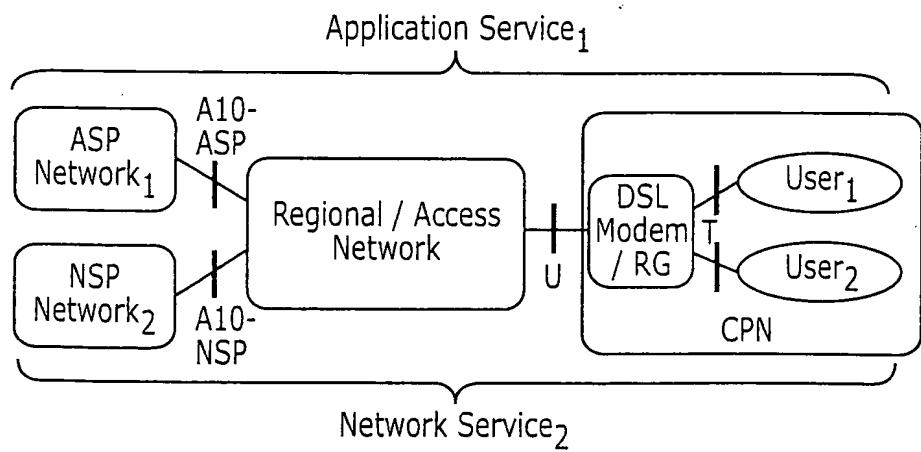


FIGURE 2
(PRIOR ART)

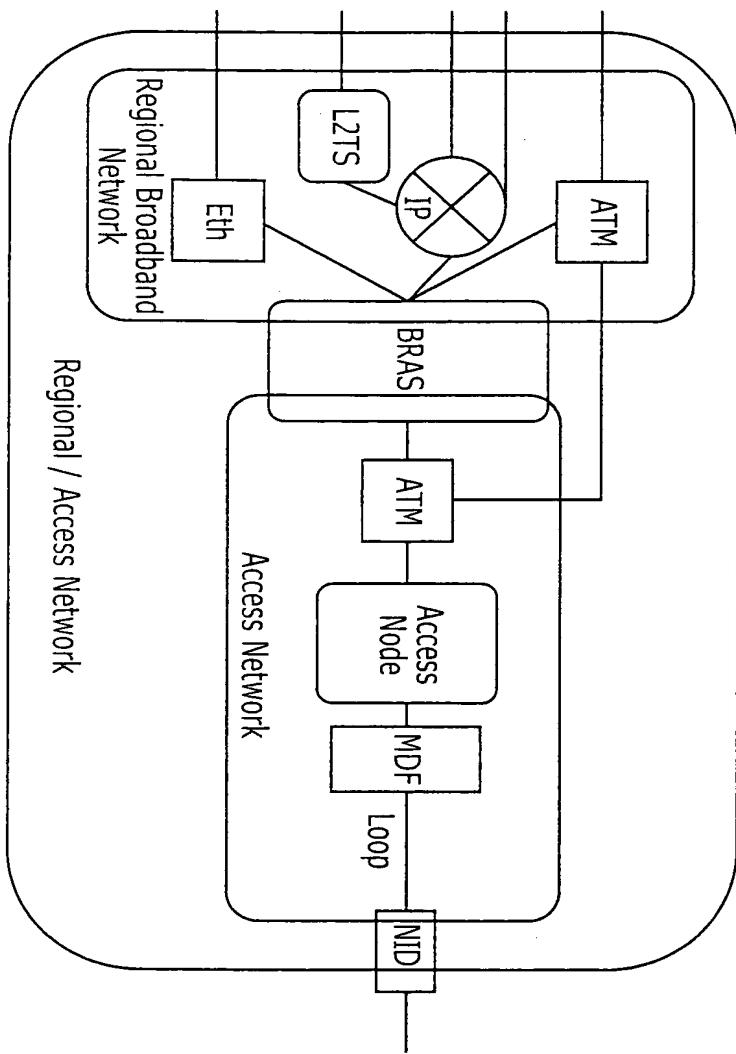


FIGURE 3
(PRIOR ART)

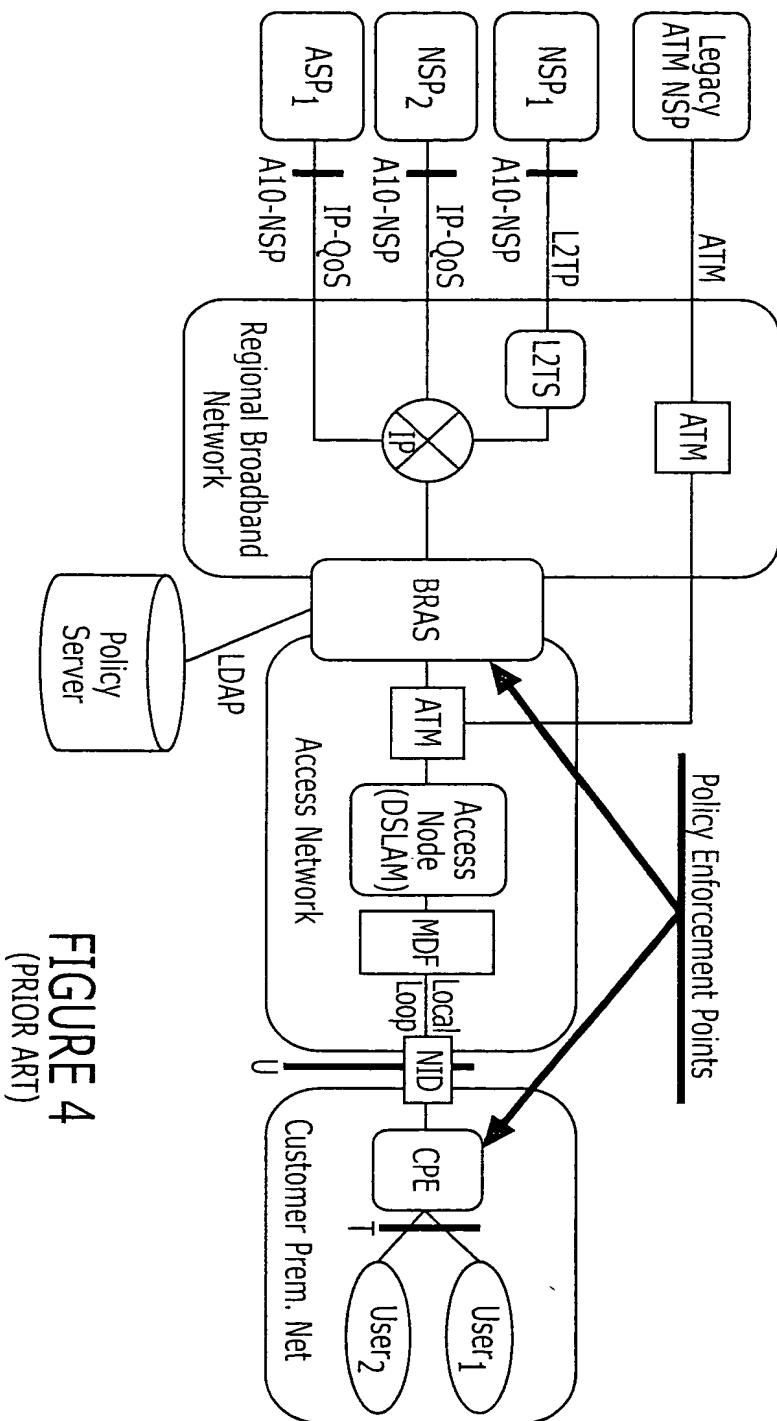


FIGURE 4
(PRIOR ART)

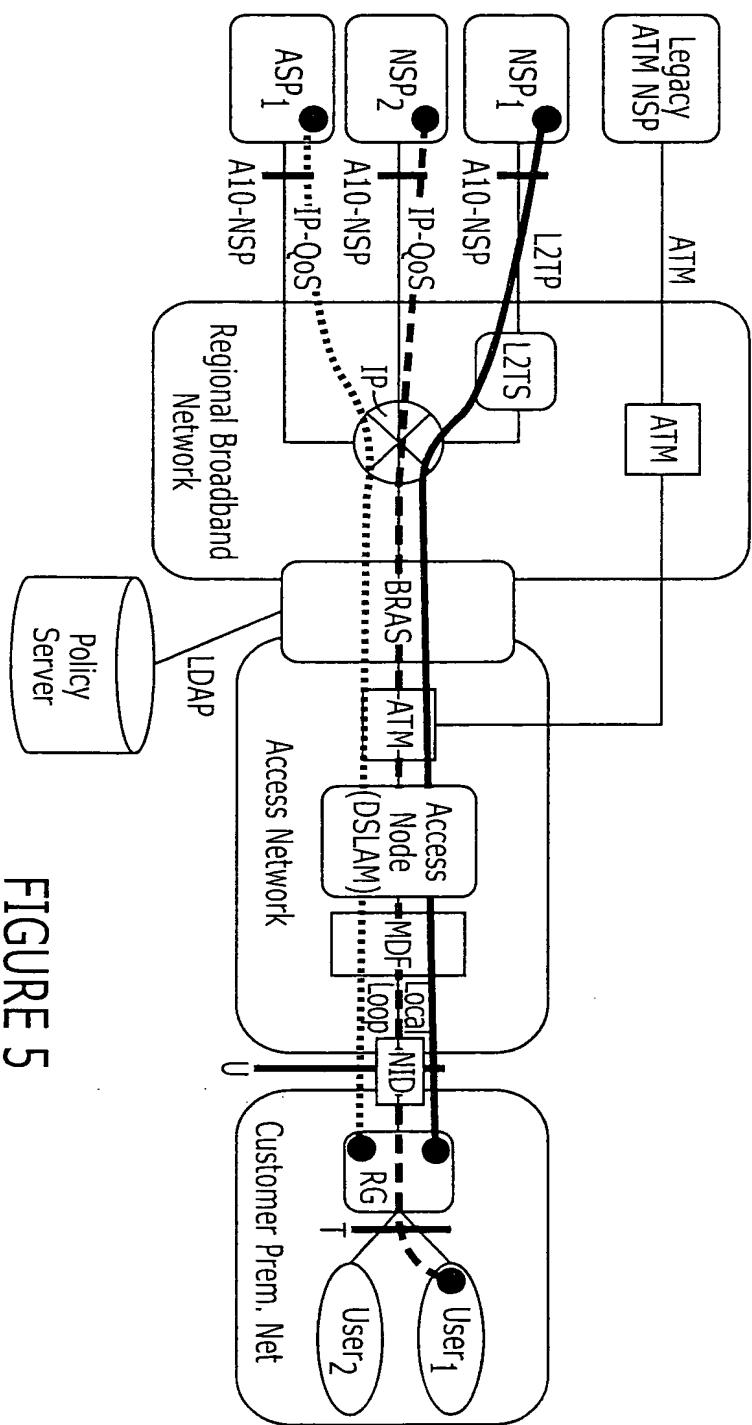


FIGURE 5

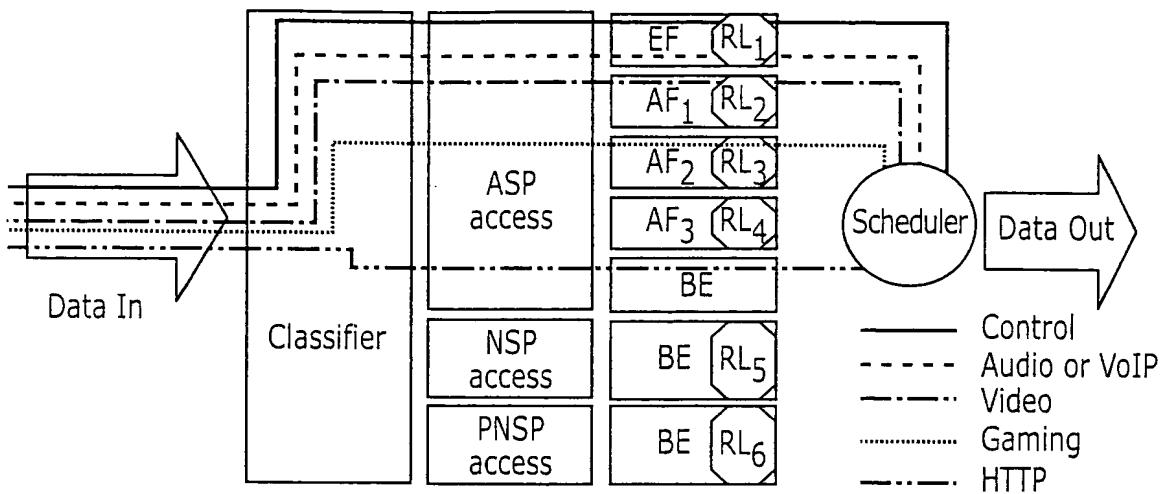


FIGURE 6

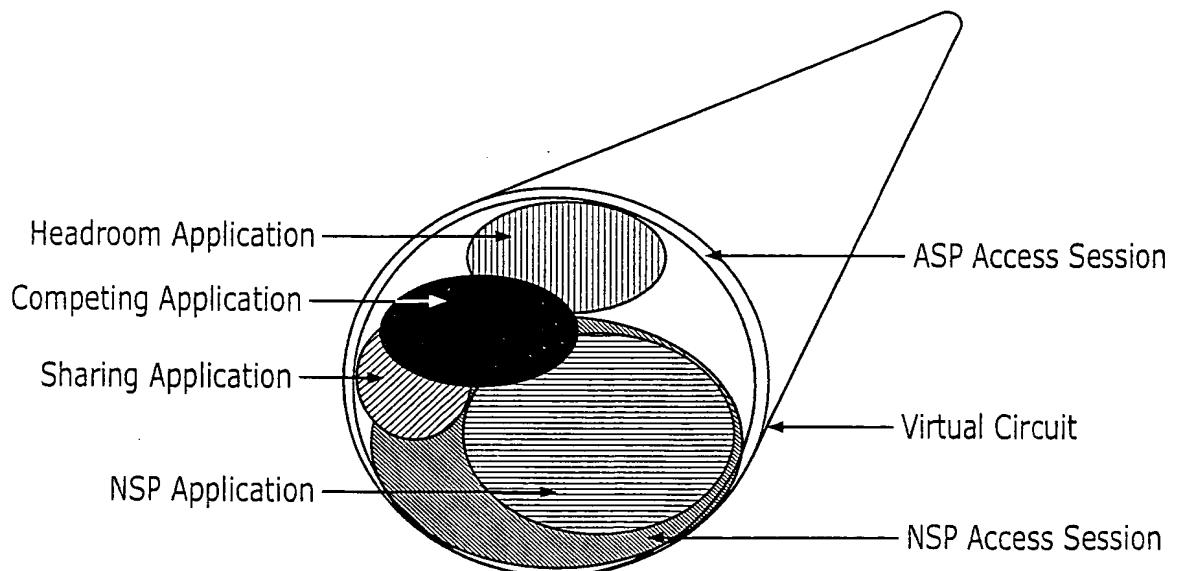
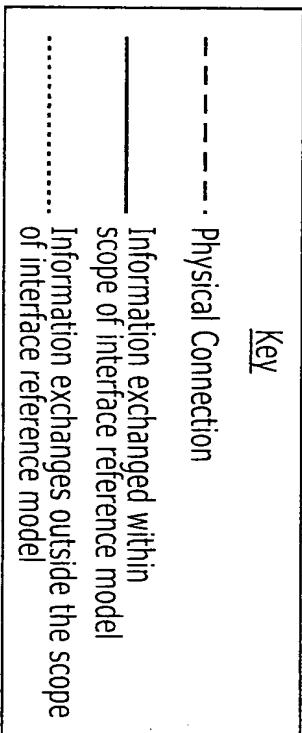


FIGURE 7



- 1,2: The subscriber exchanges information with the A/NSP when signing up for a service
- 3: The subscriber configures the RG. This may only be for the initial install. The ACS located within the Regional/Access Network may handle all subsequent conf changes
- 4: The RG initiates access sessions that are terminated in the DSL network. The ACS communicates with the RG for the configuration updates.
- 5,6: The NSP communicates with the DSL network to establish a DSL connection. The ASP and NSP also communicate bandwidth and QoS changes per session or application.

FIGURE 8

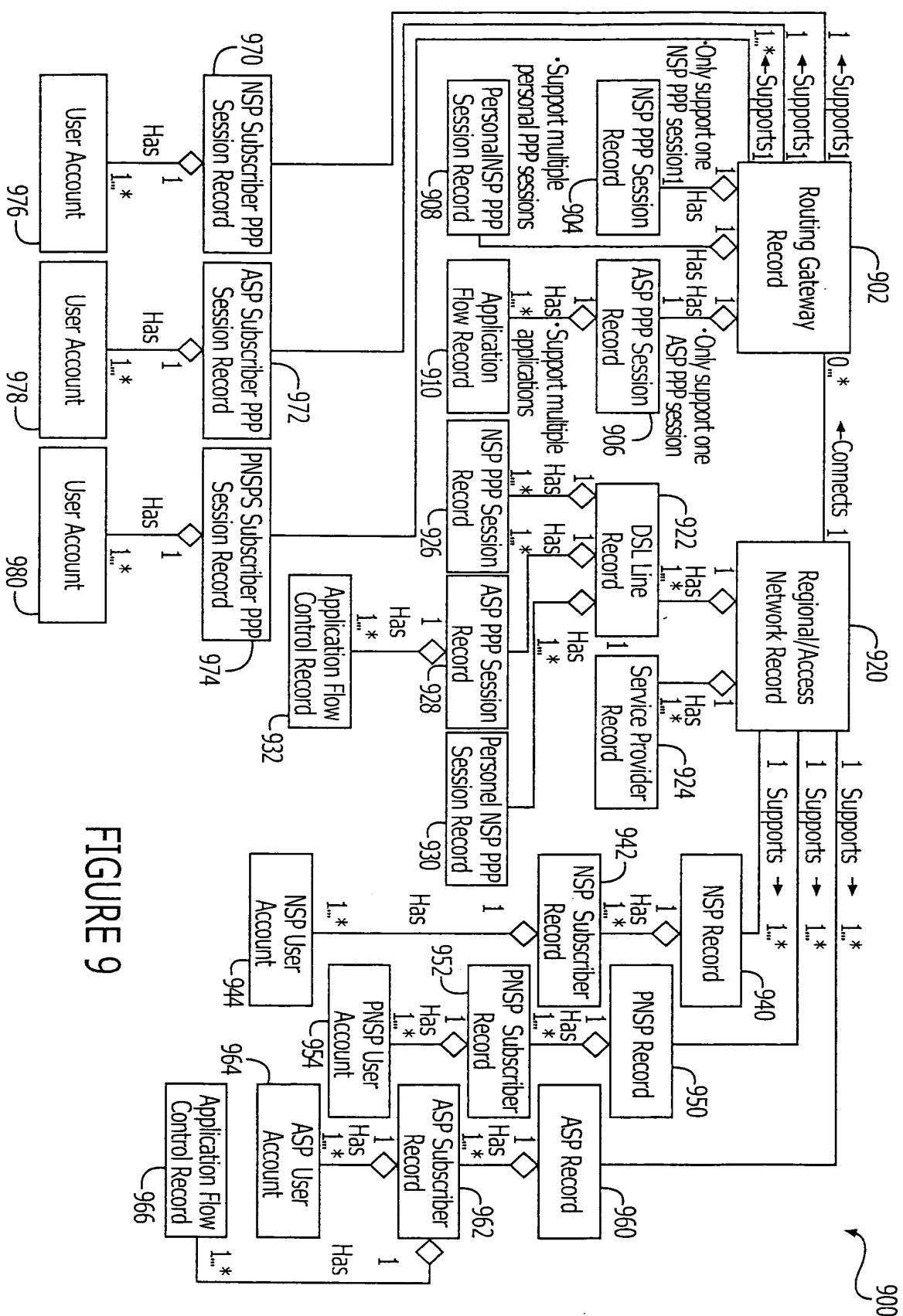


FIGURE 9

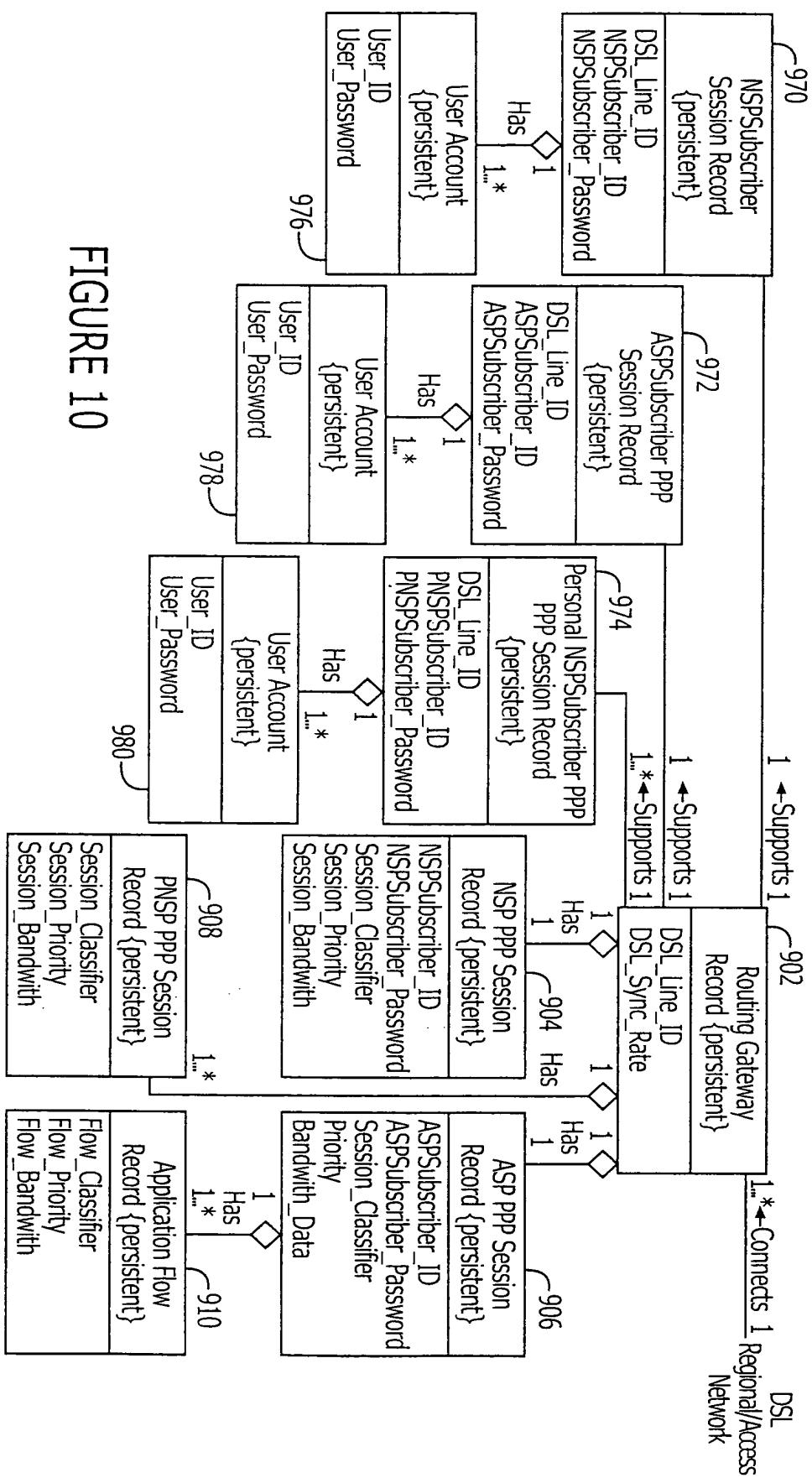


FIGURE 10

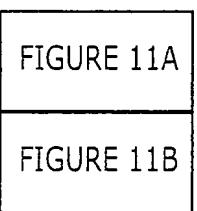


FIGURE 11

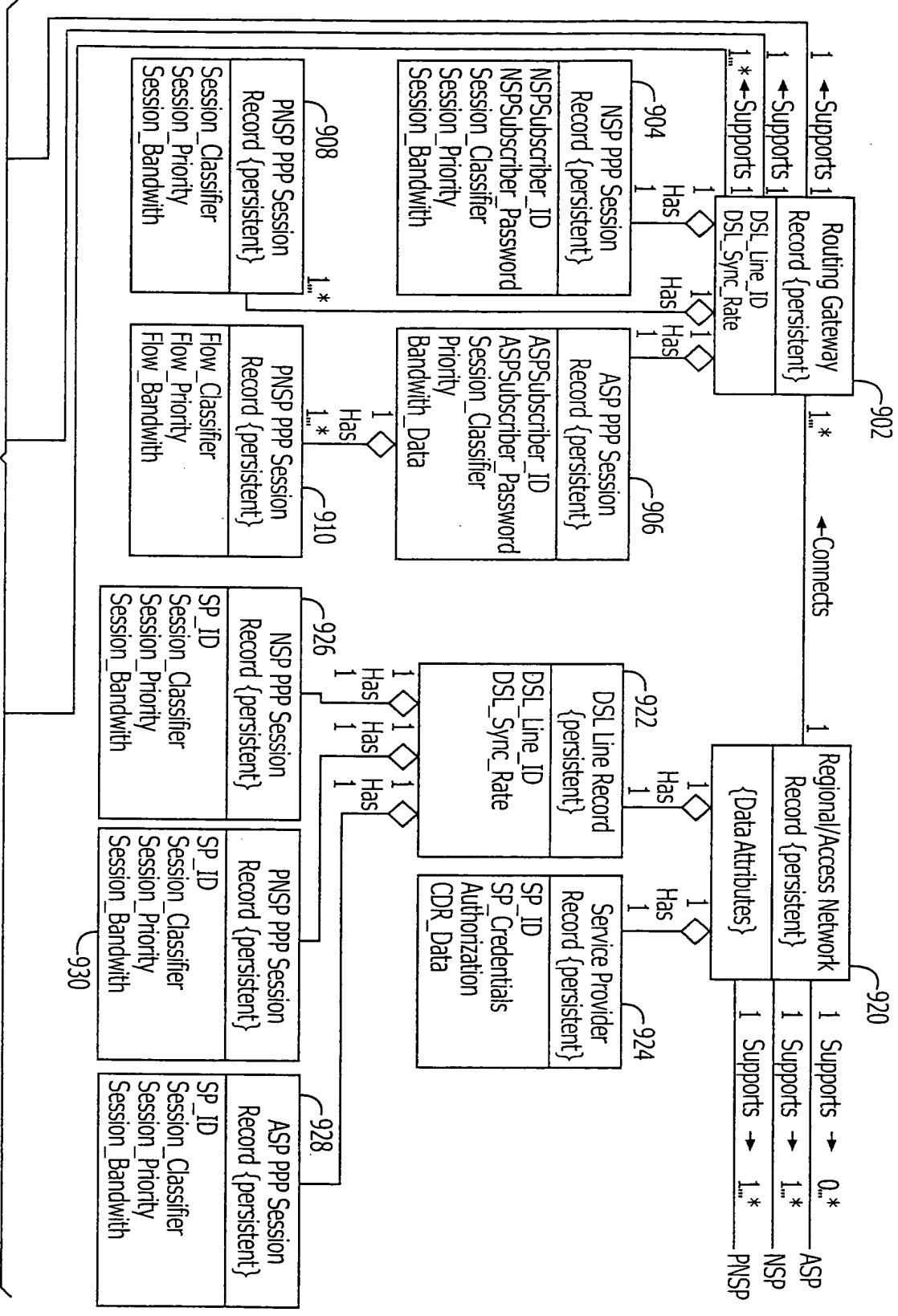


FIGURE 11A

FIGURE 11A

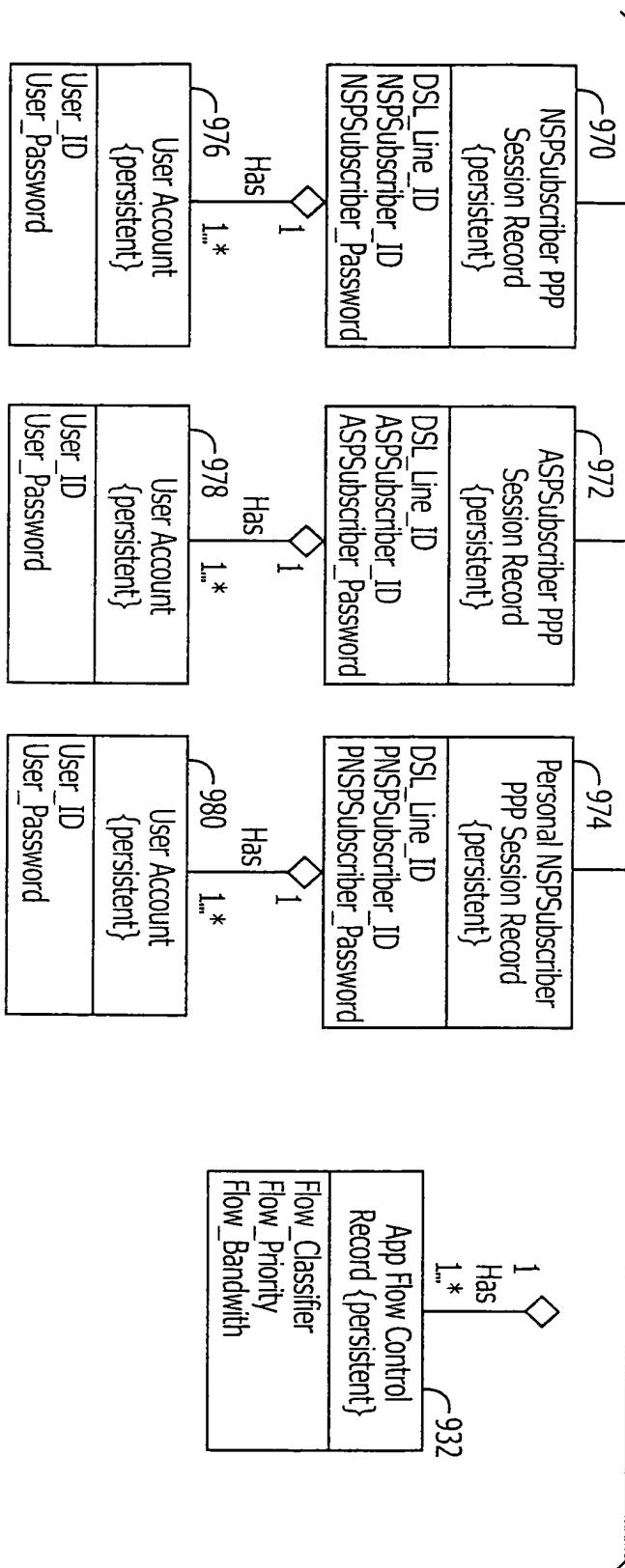


FIGURE 11B

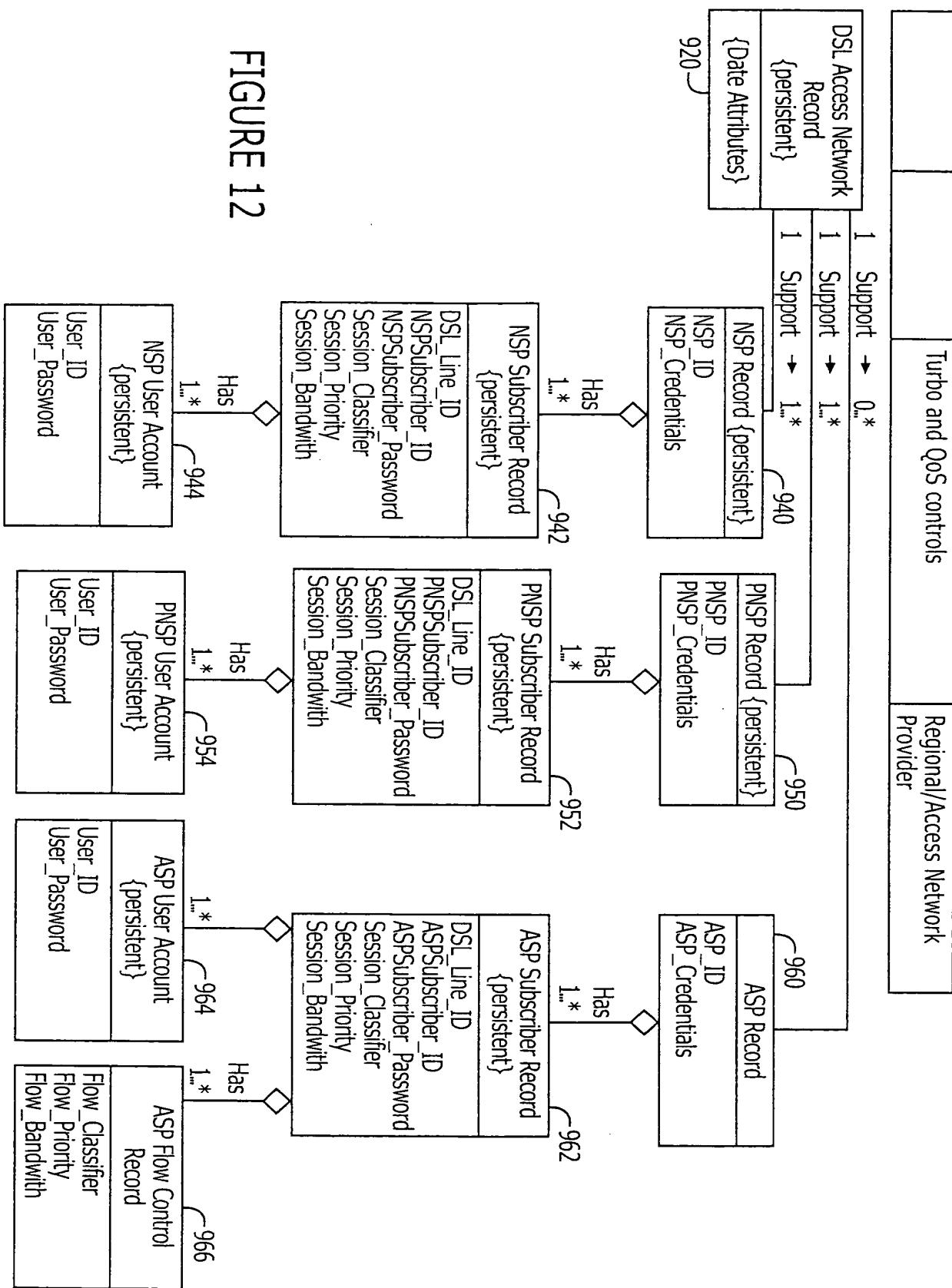


FIGURE 12

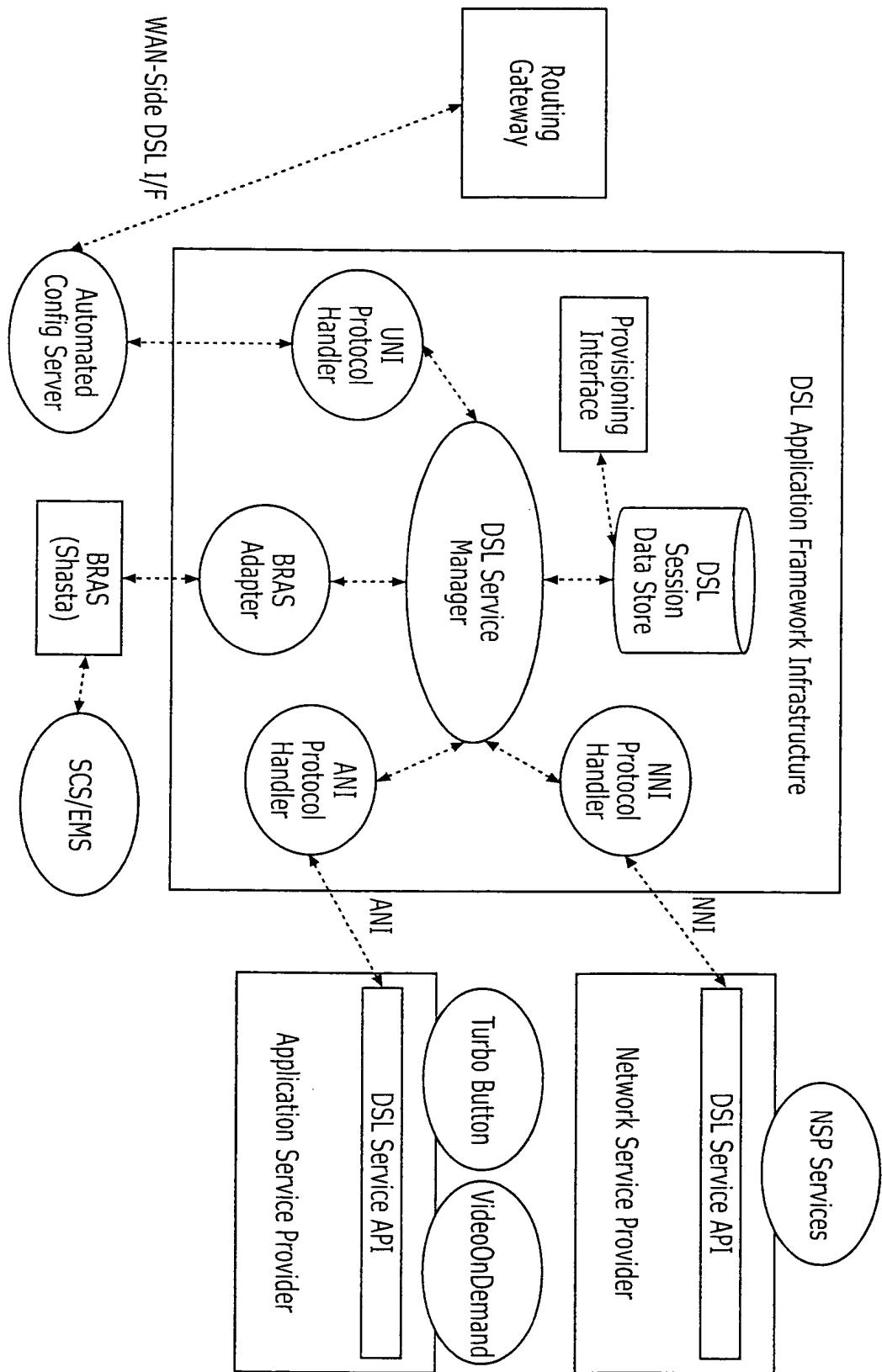


FIGURE 13

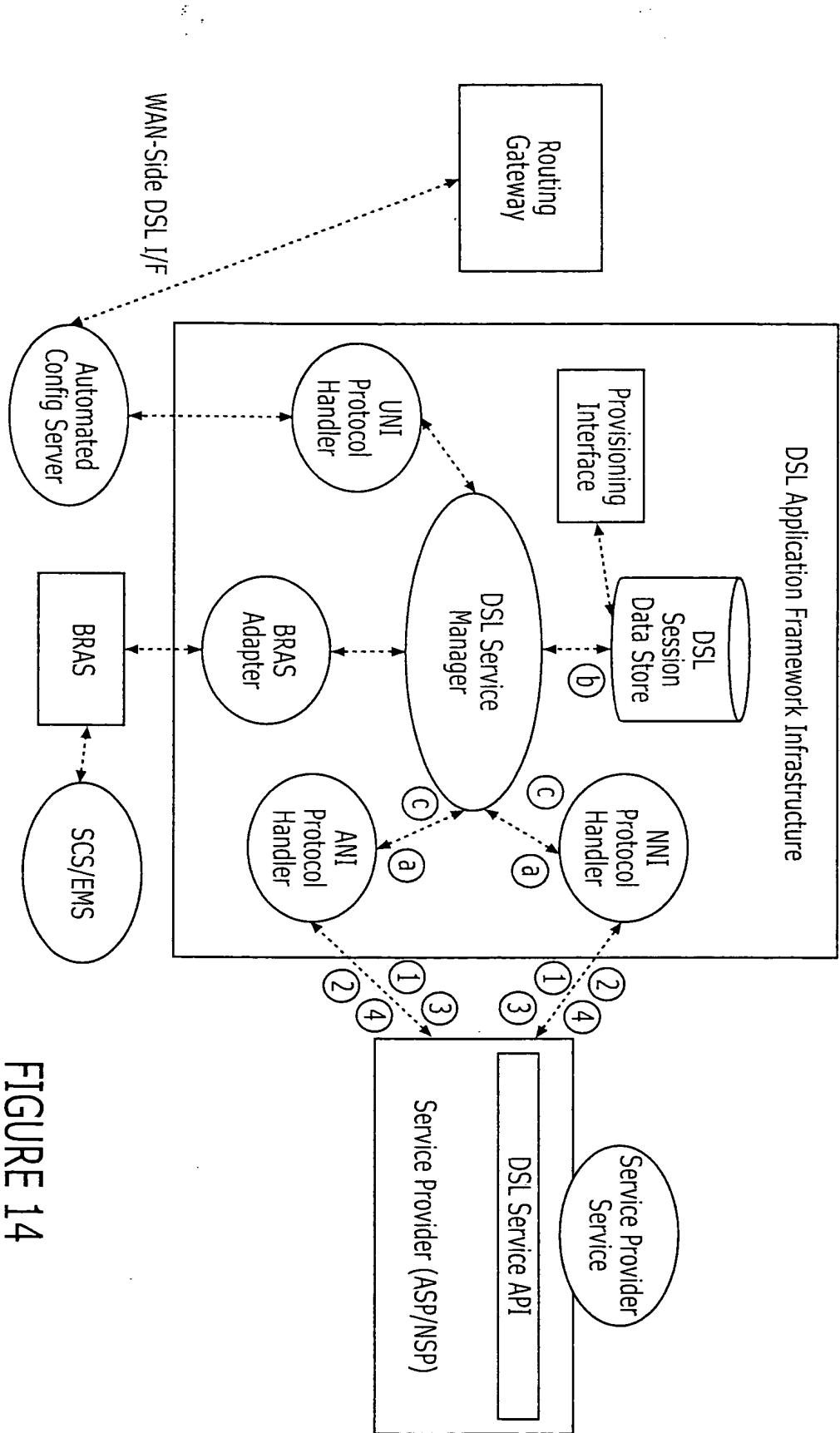


FIGURE 14

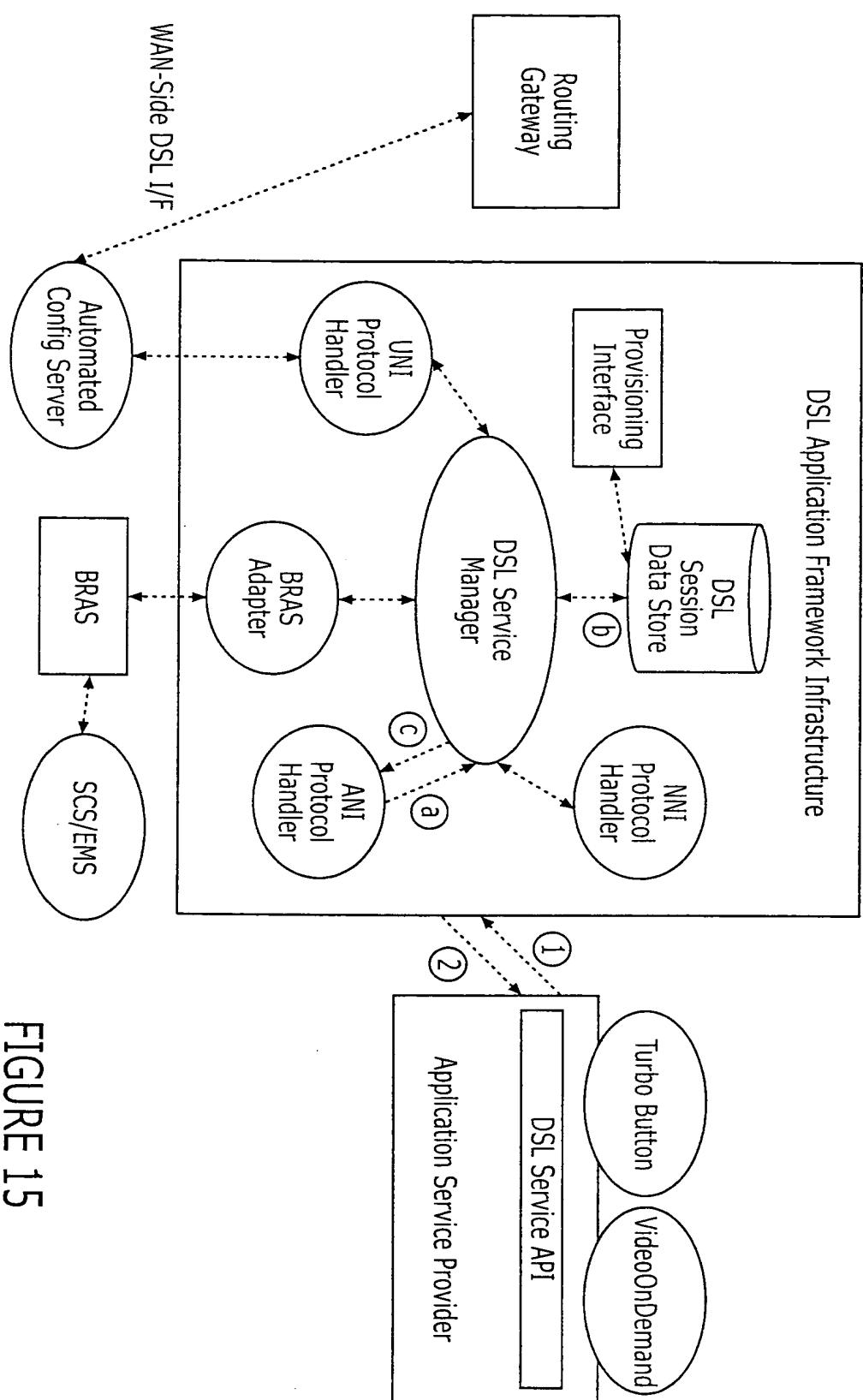


FIGURE 15

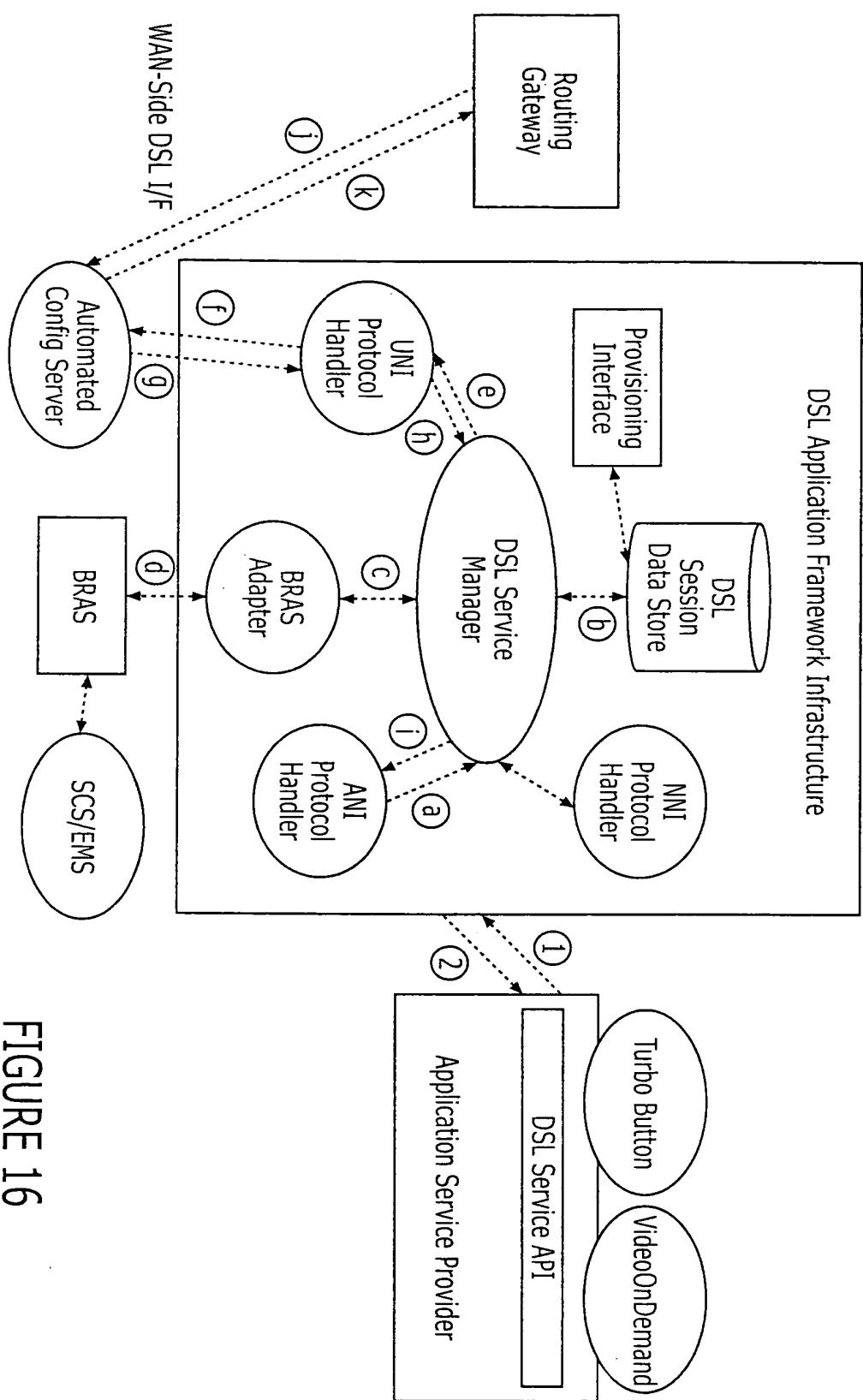


FIGURE 16

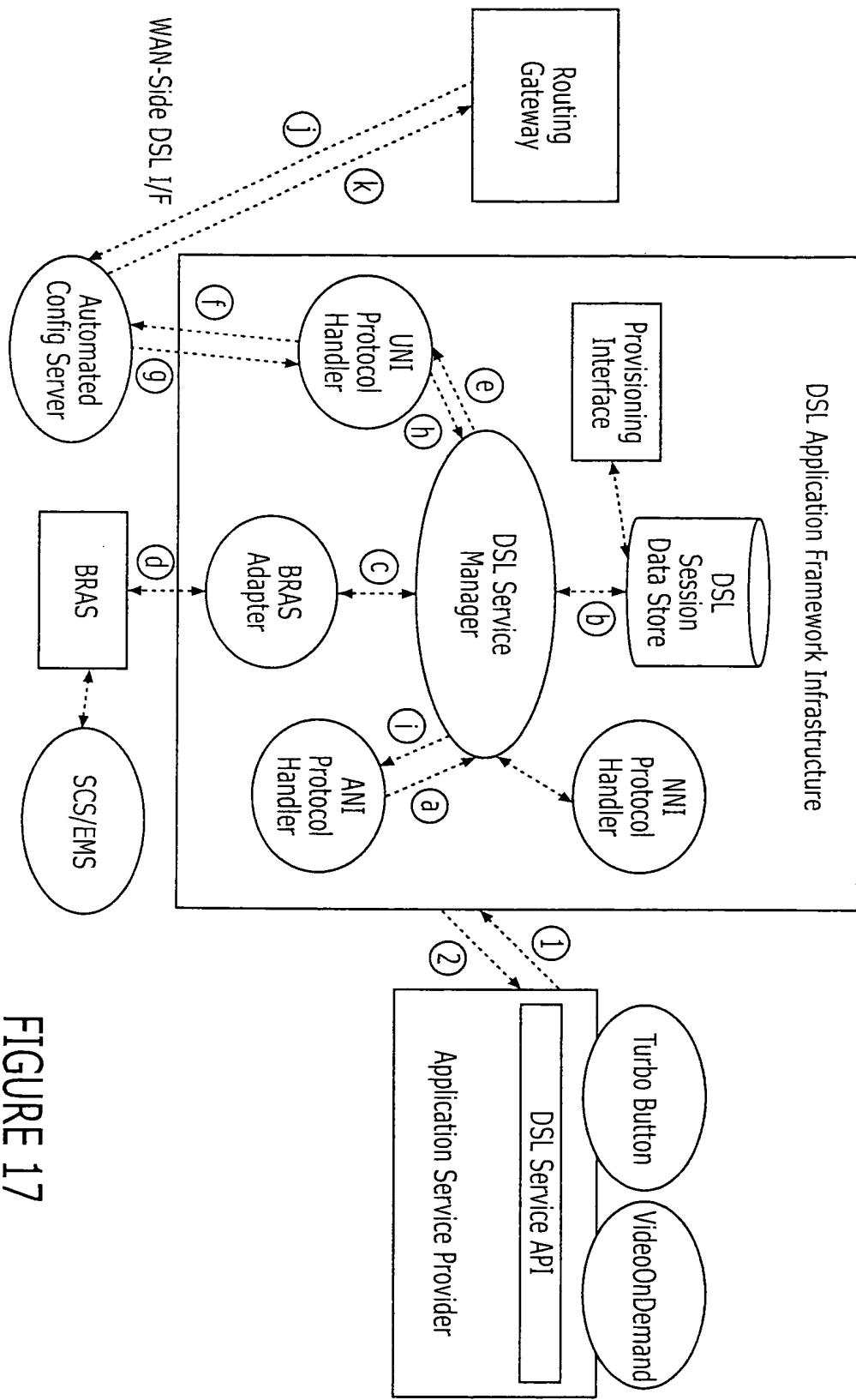


FIGURE 17

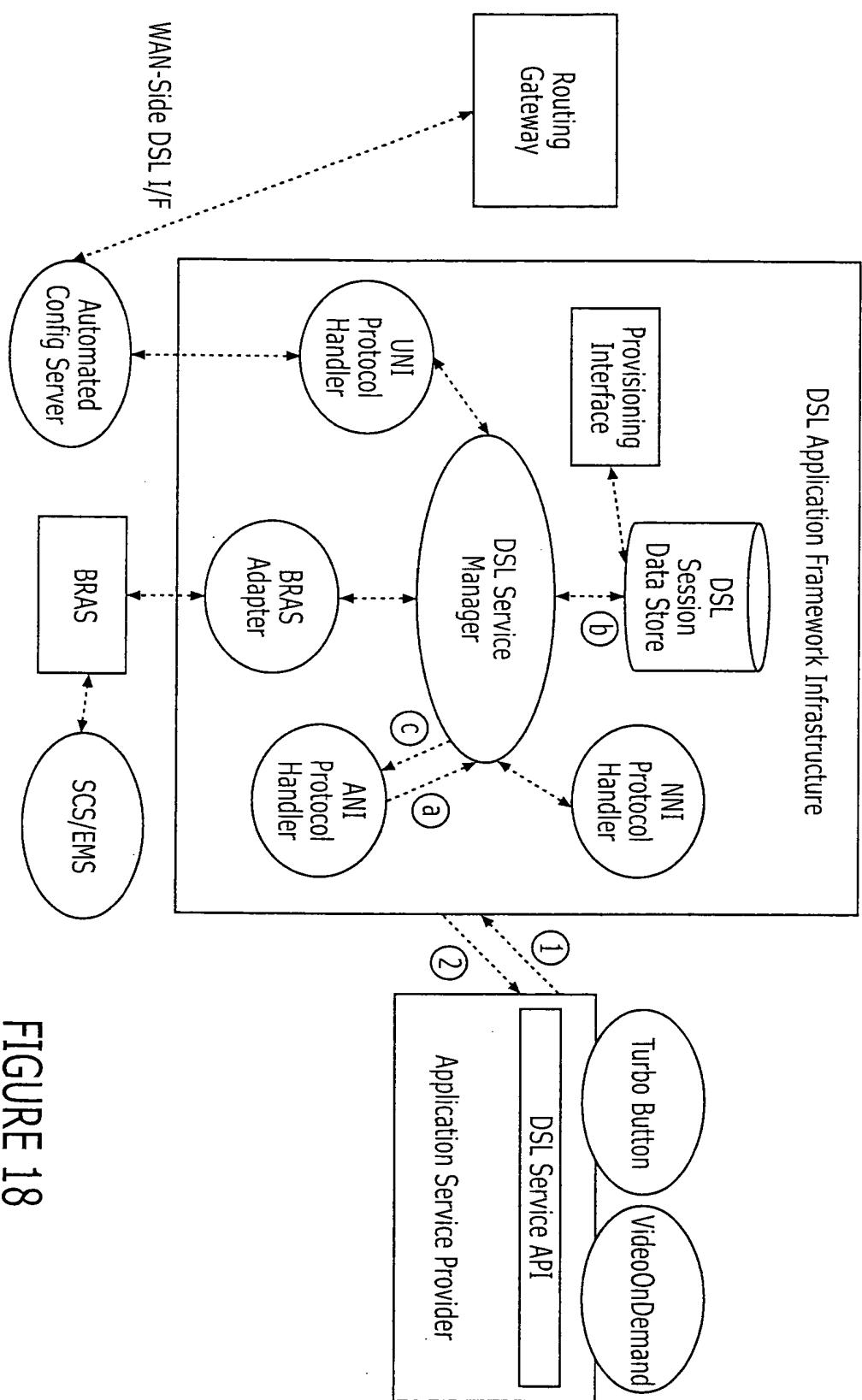


FIGURE 18

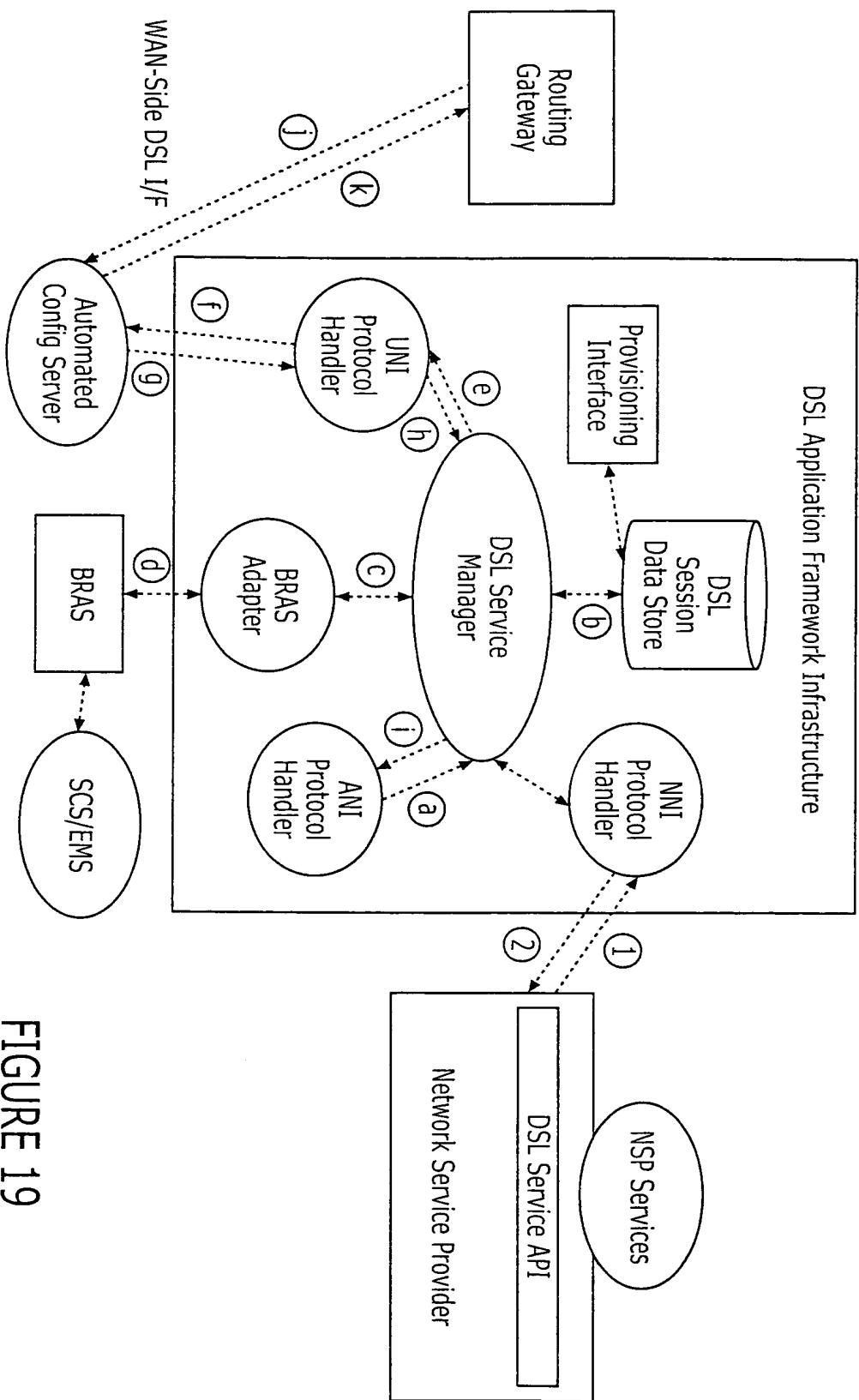


FIGURE 19

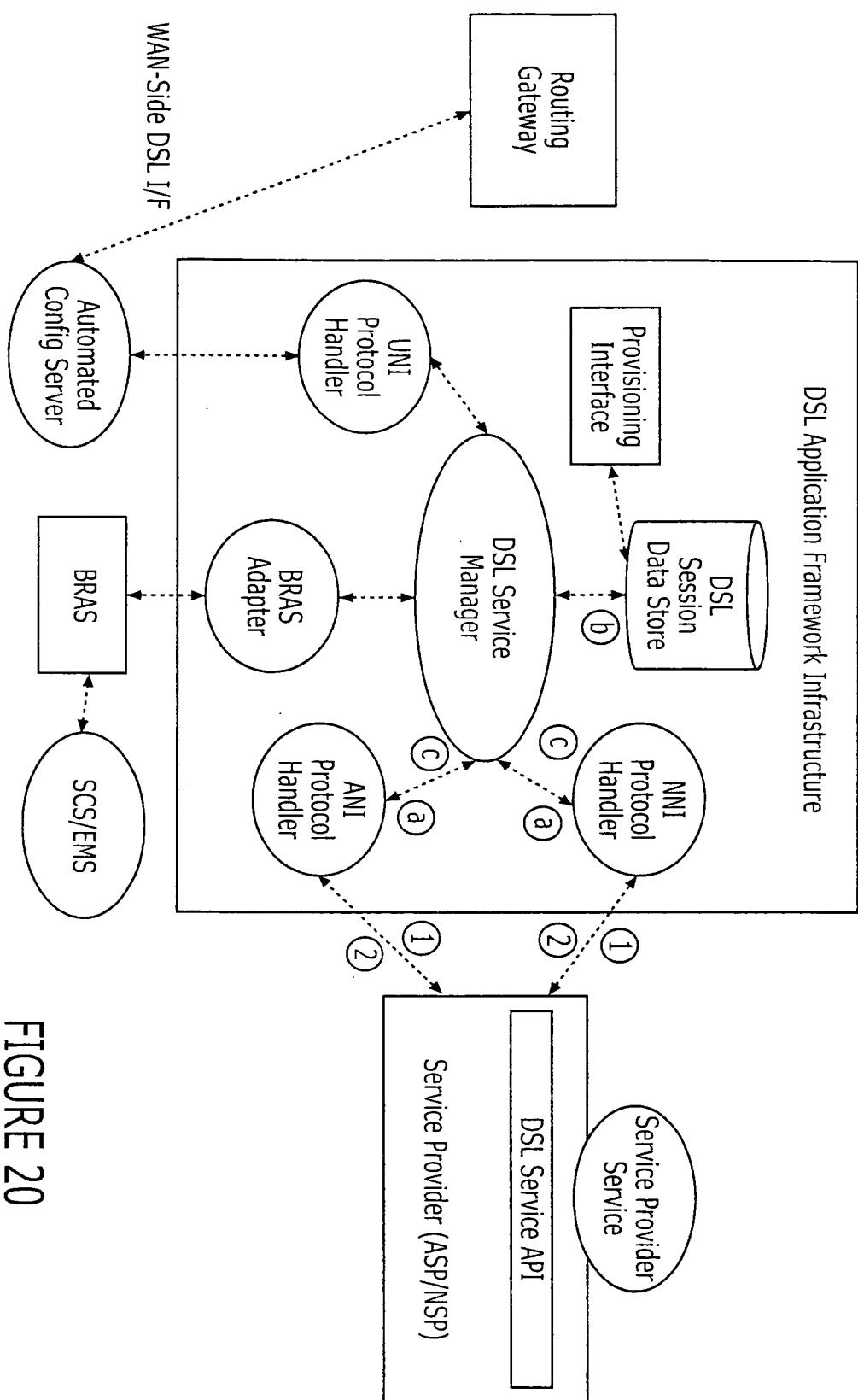


FIGURE 20

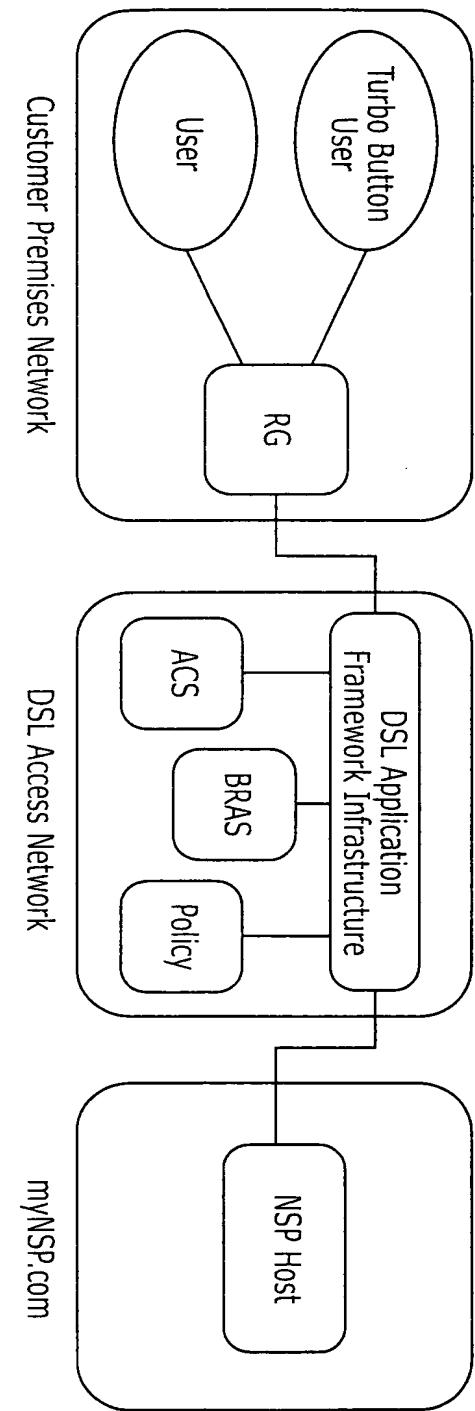


FIGURE 21

FIGURE 22

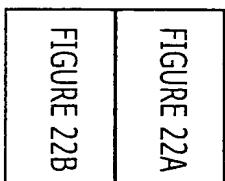


FIGURE 22B

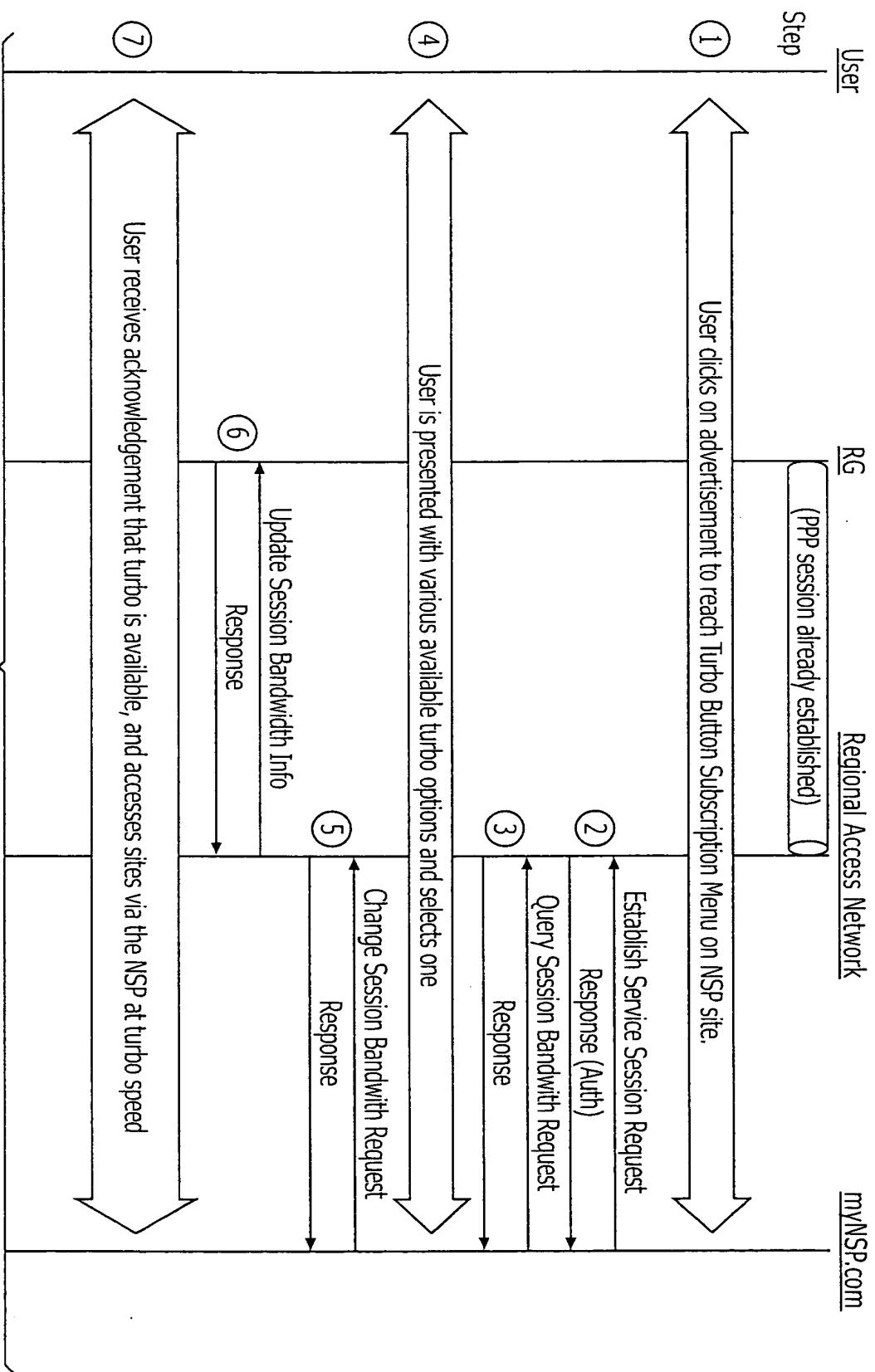


FIGURE 22B

FIGURE 22A

FIGURE 22A

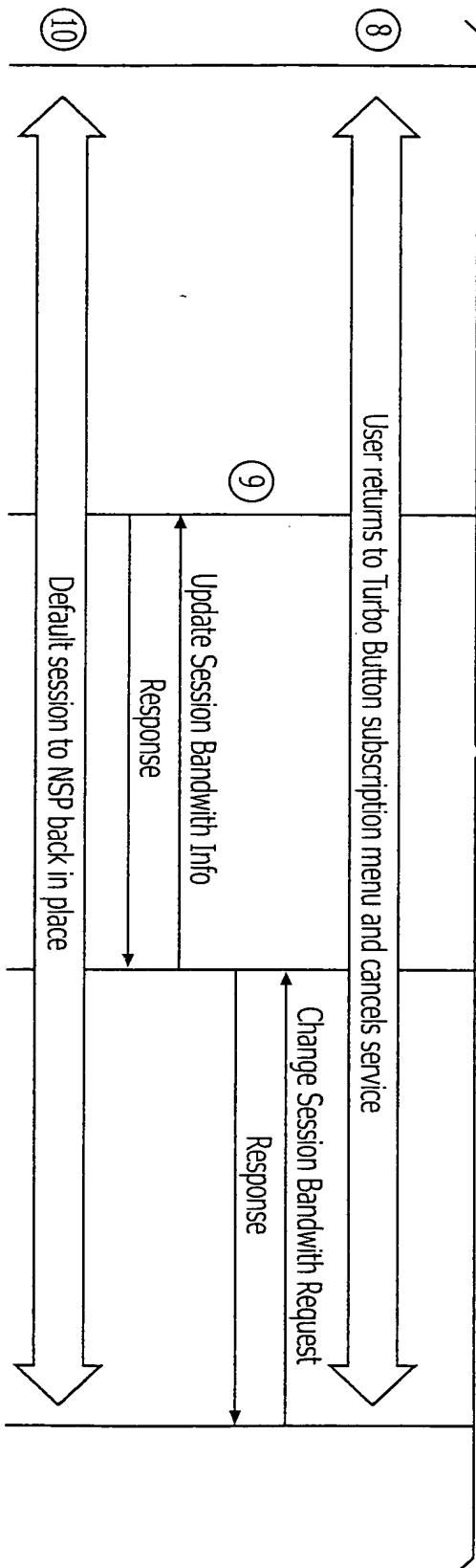


FIGURE 22B

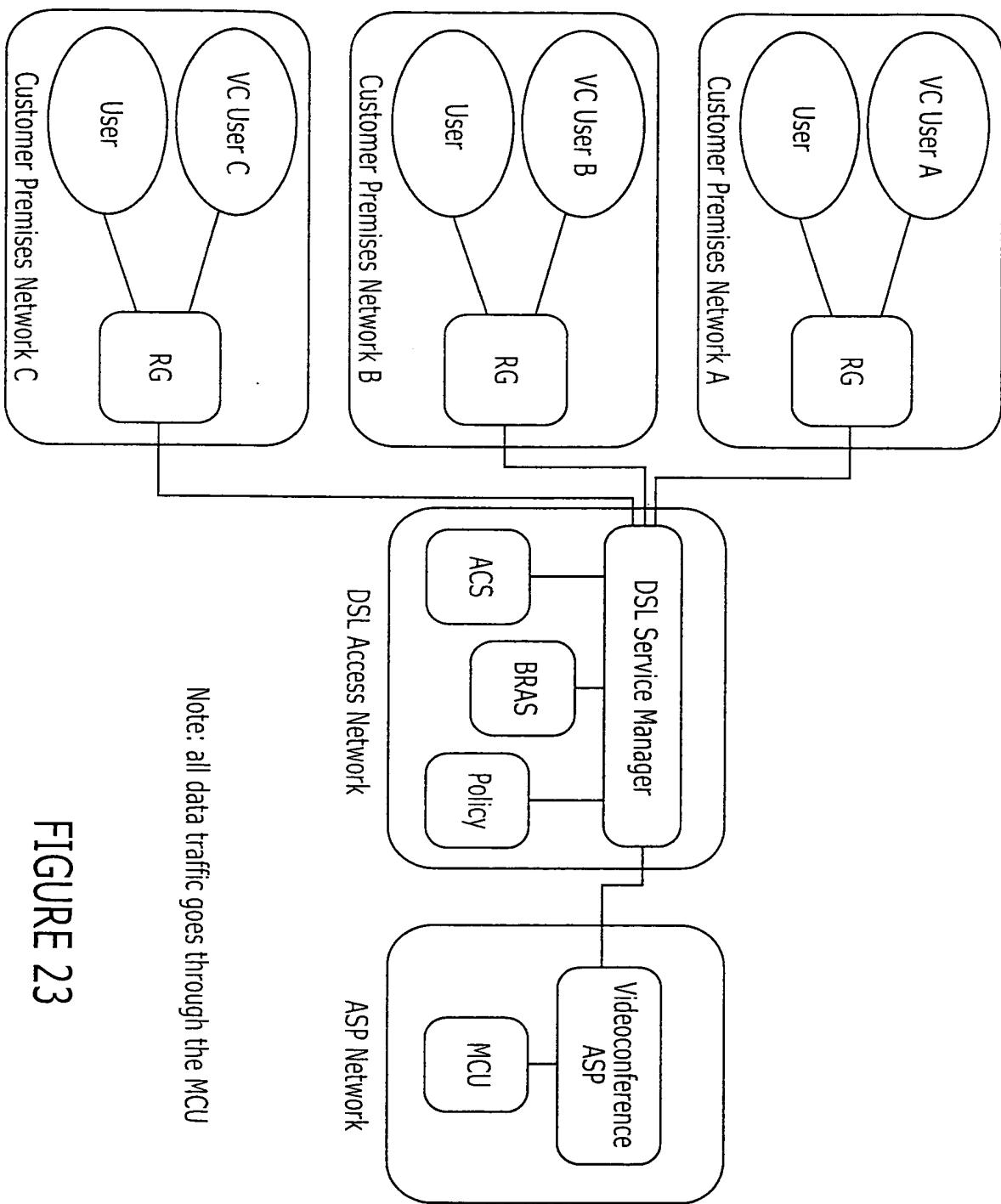


FIGURE 23

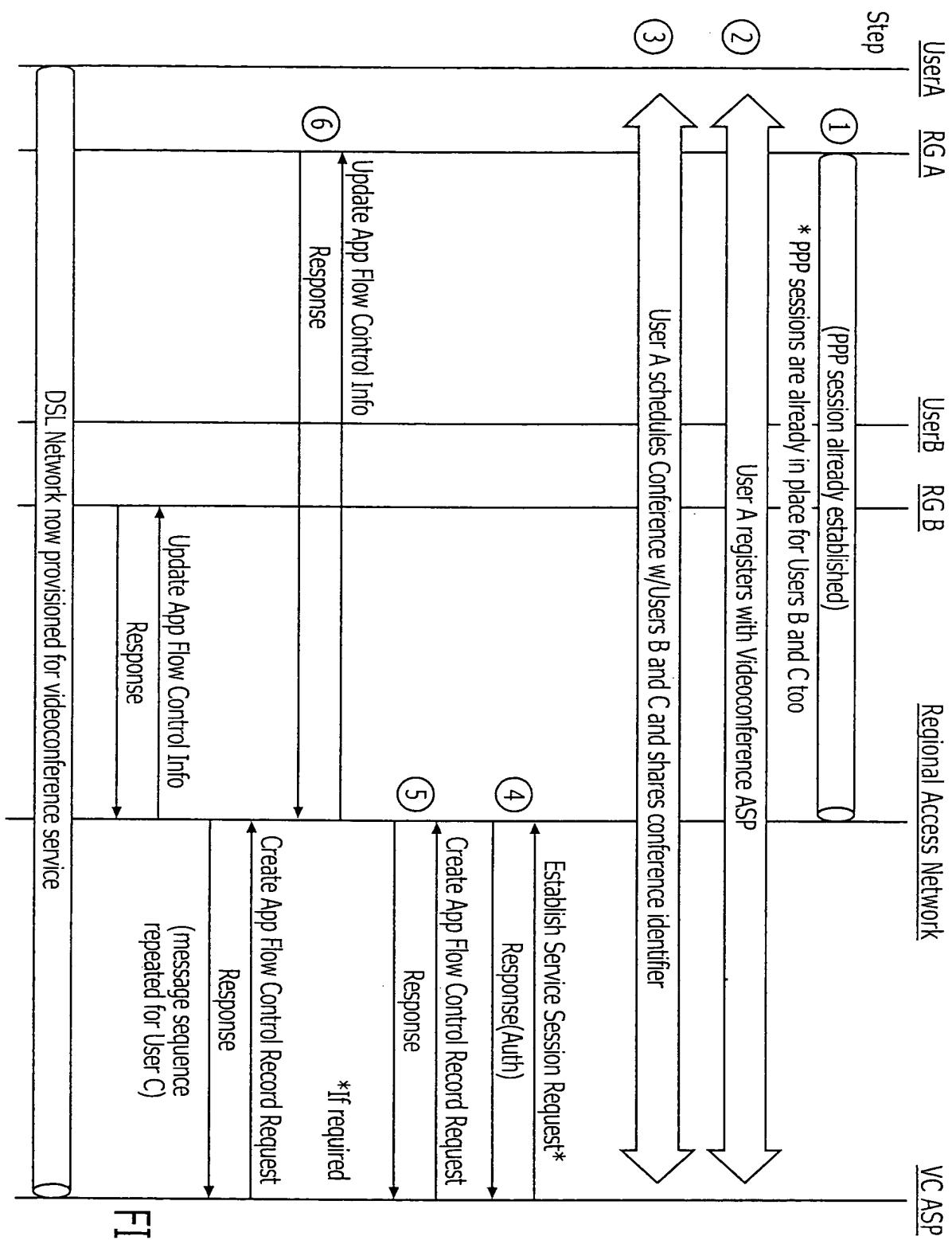


FIGURE 24

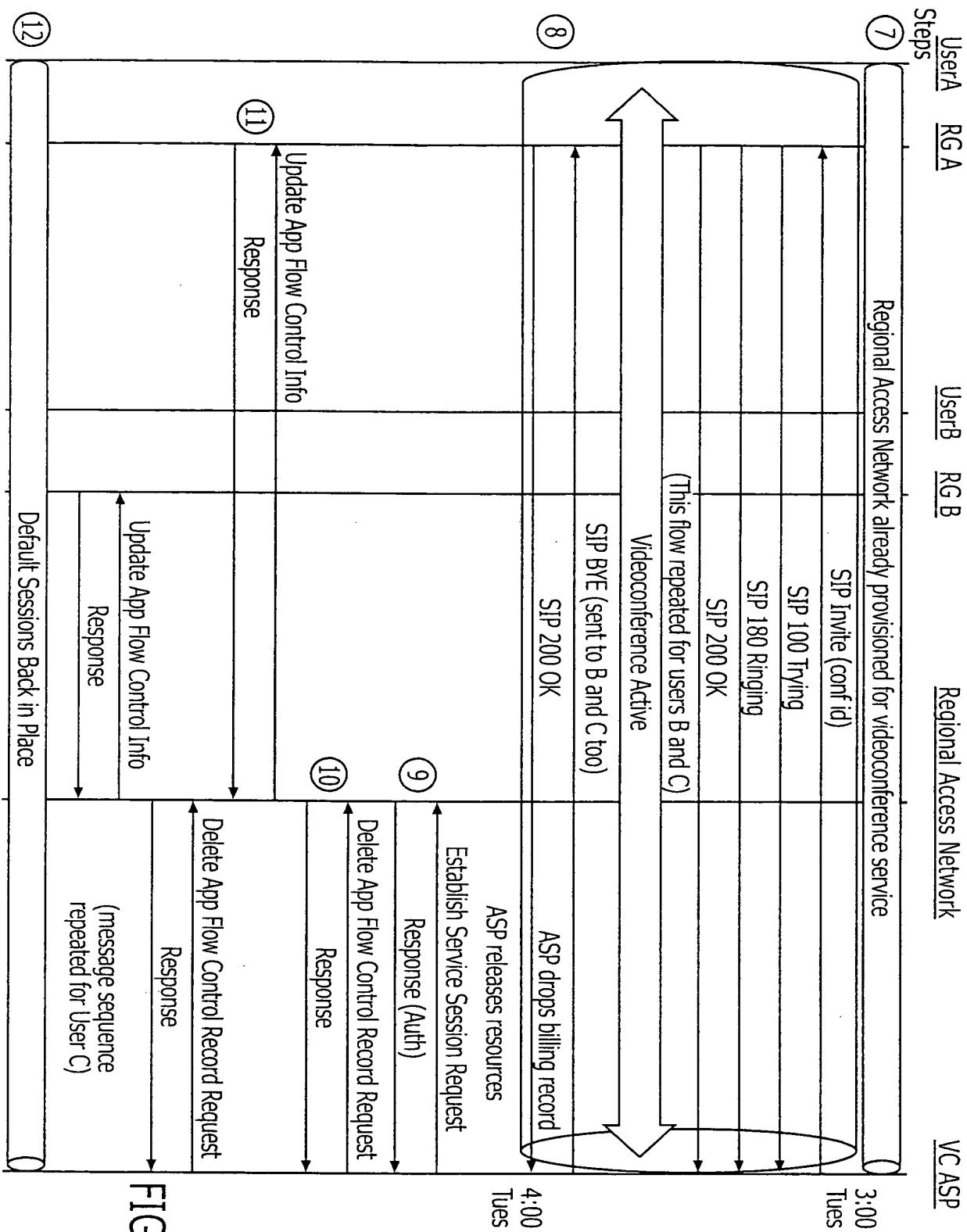


FIGURE 25

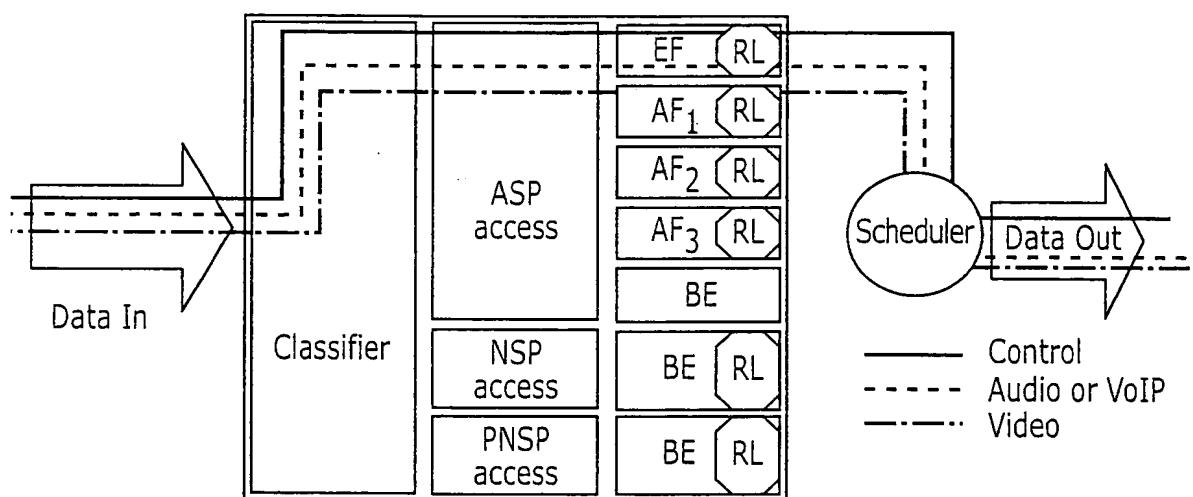


FIGURE 26

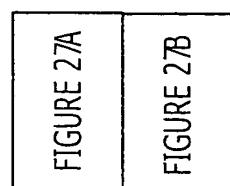
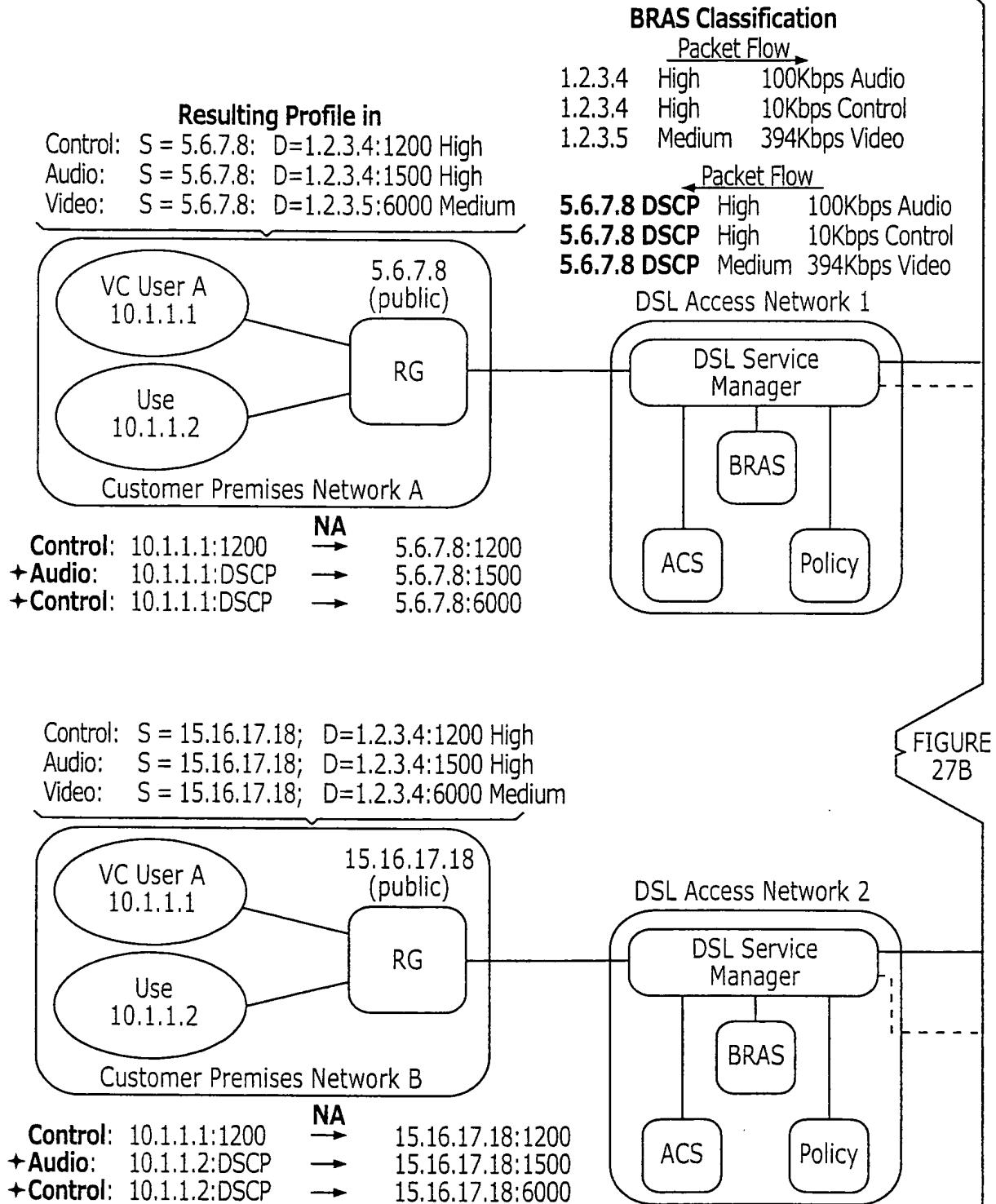


FIGURE 27



→ These flows are set up dynamically at the VC client and the DSCP are assigned for the audio and the video streams. The ALG/NAT maps the 10.X.X.X ports to the corresponding IP address and ports for audio and video specified in the ACS profile based on the DSCP set by the VC client. This ensures that the RG, BRAS, and ASP videoconference MCU maintain consistent port information with regard to the various flows.

FIGURE 27A

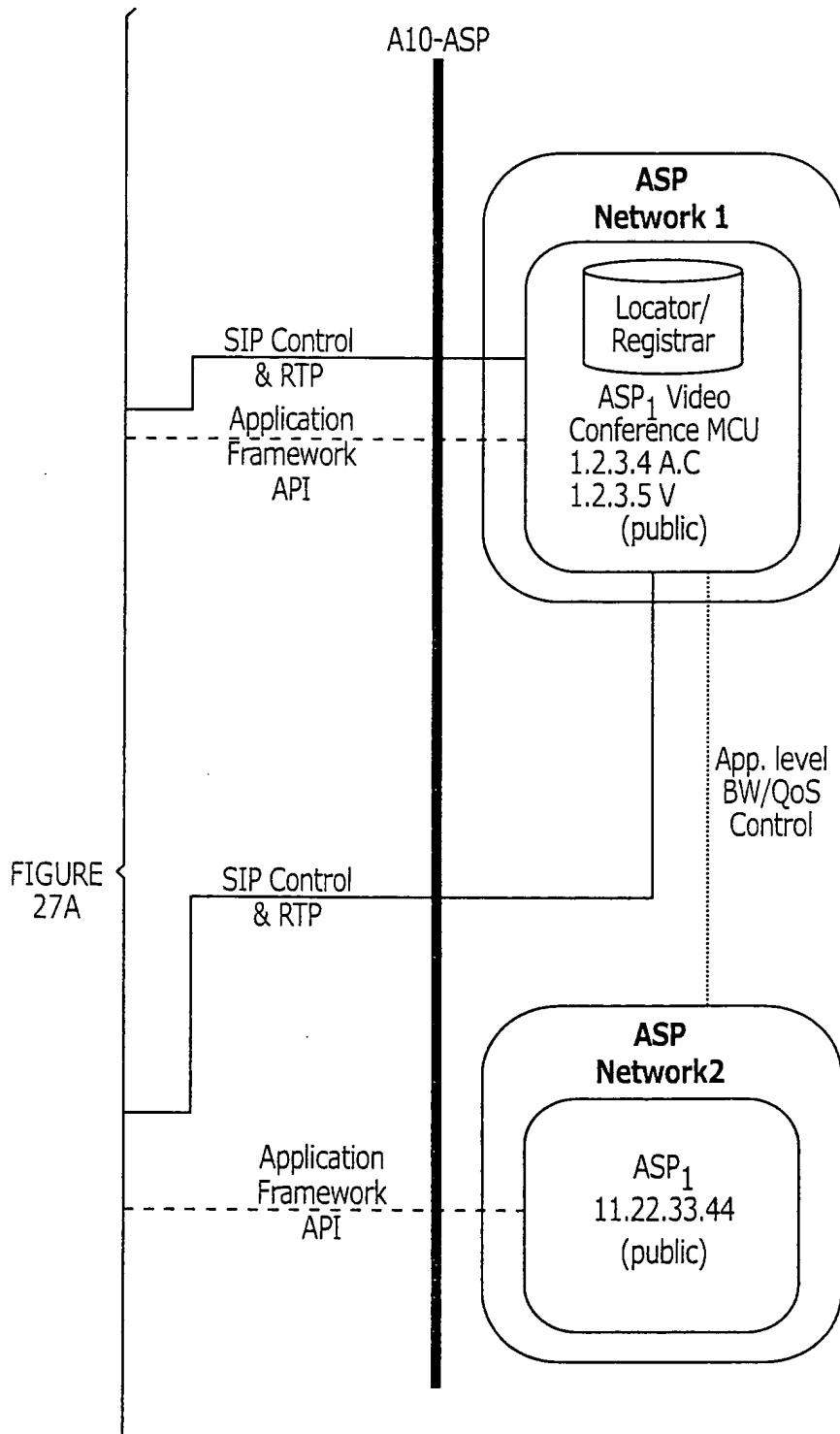


FIGURE 27B

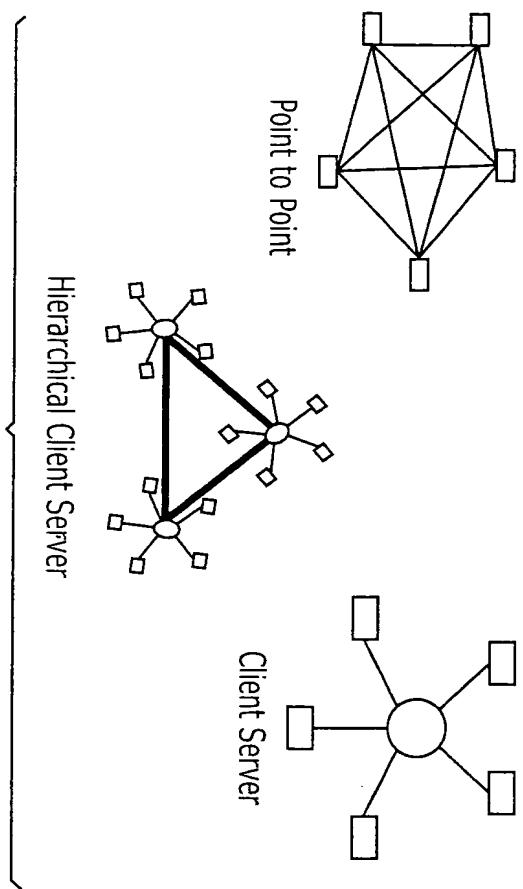


FIGURE 28

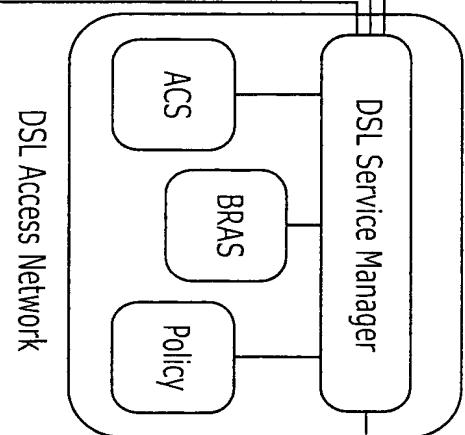
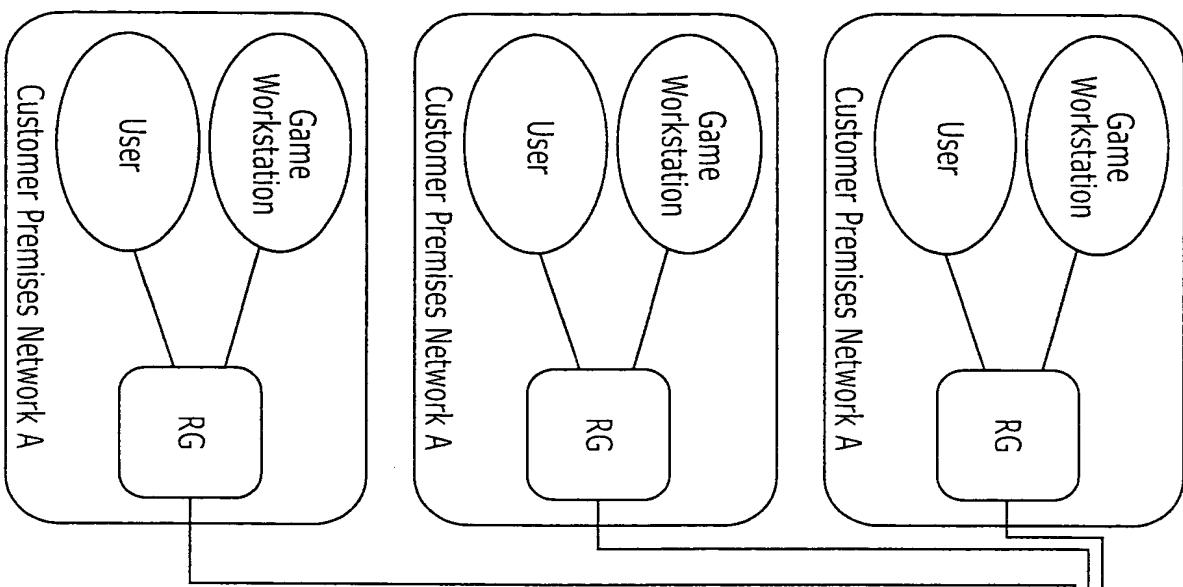


FIGURE 29

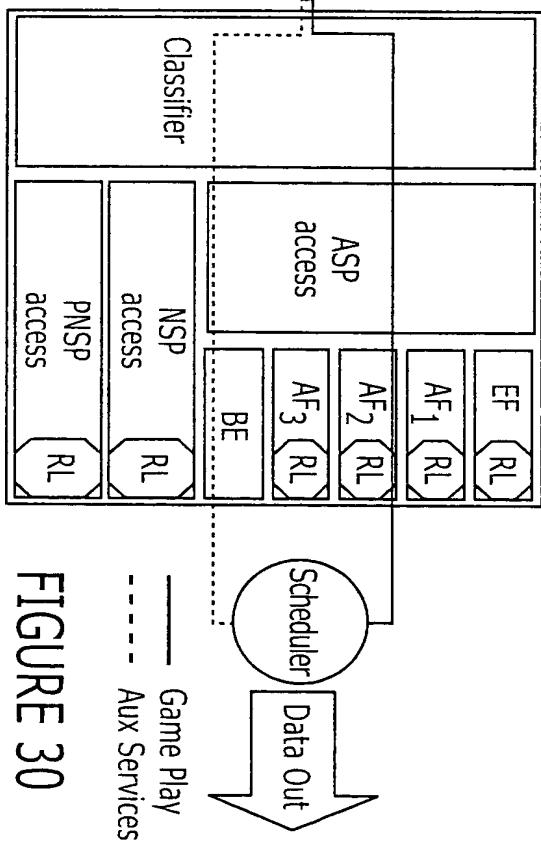


FIGURE 30

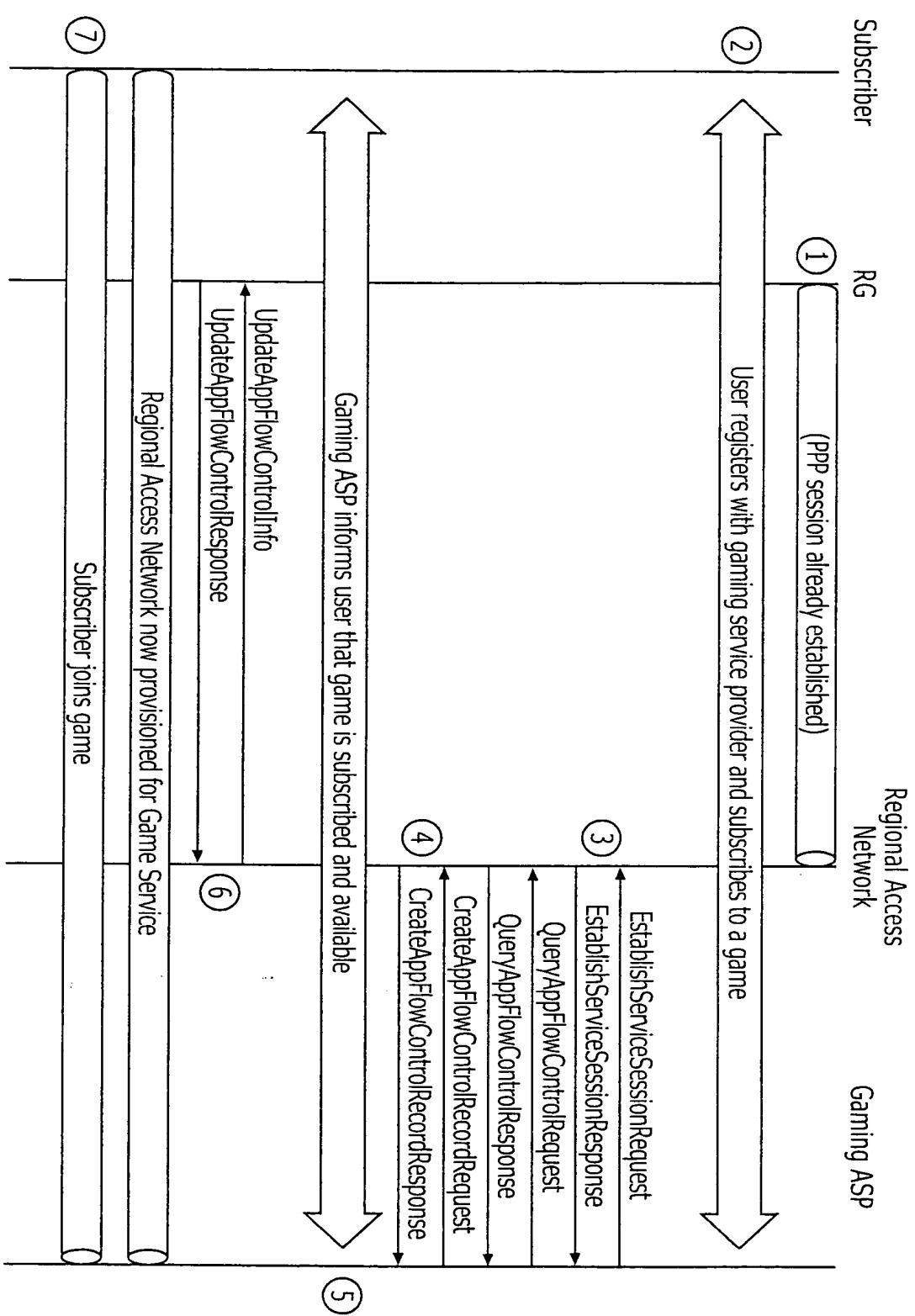


FIGURE 31

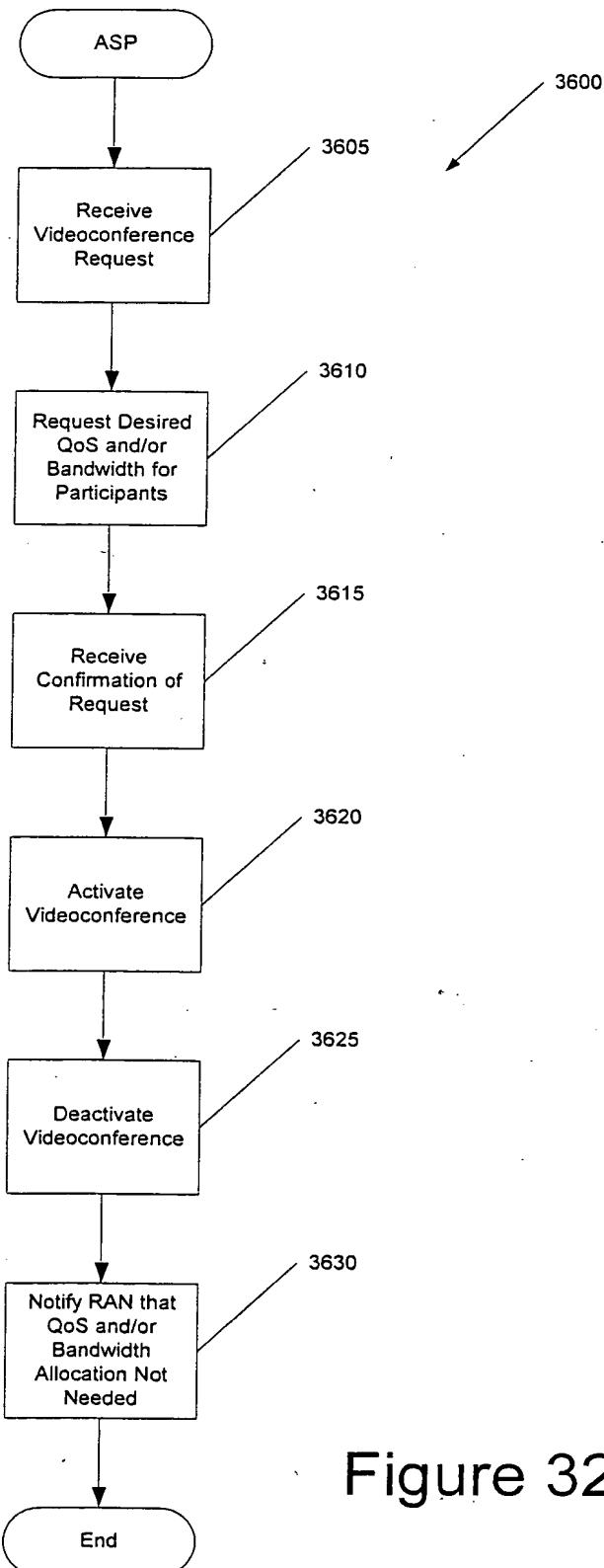


Figure 32

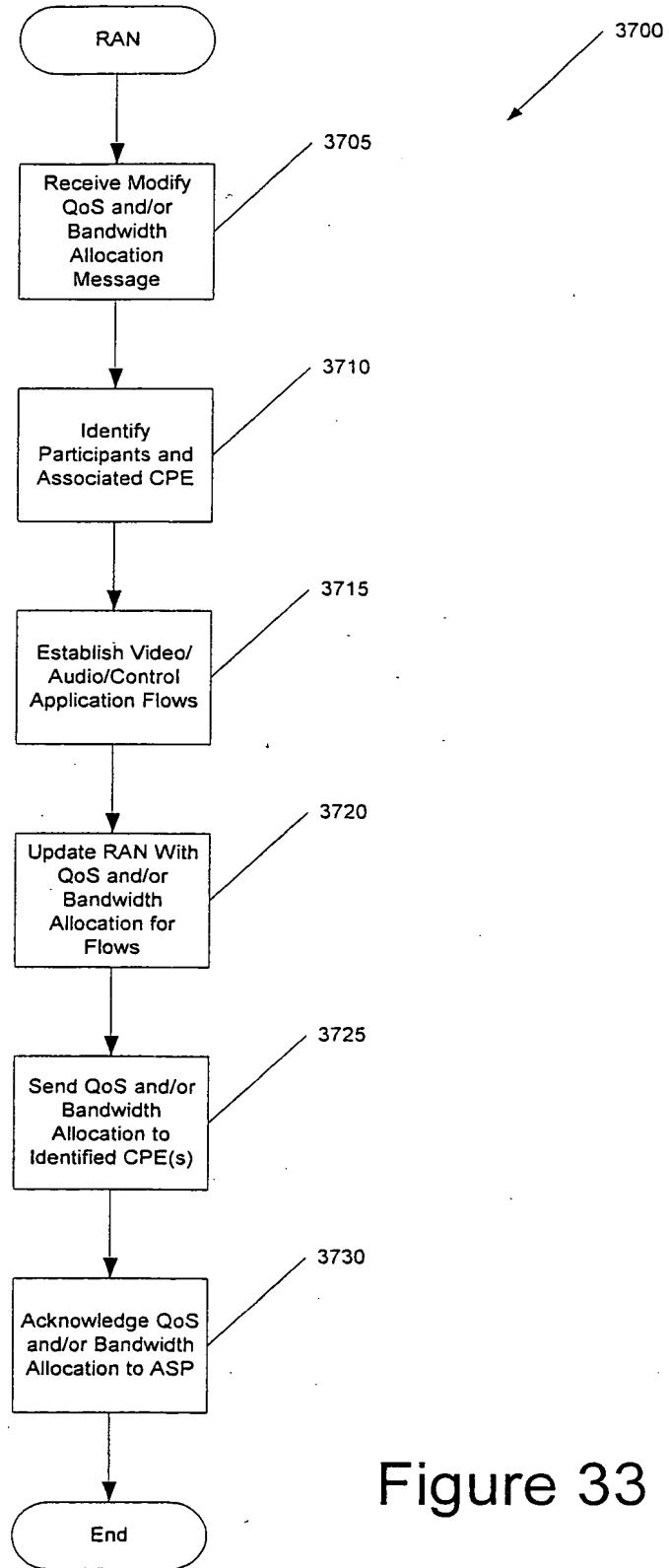


Figure 33

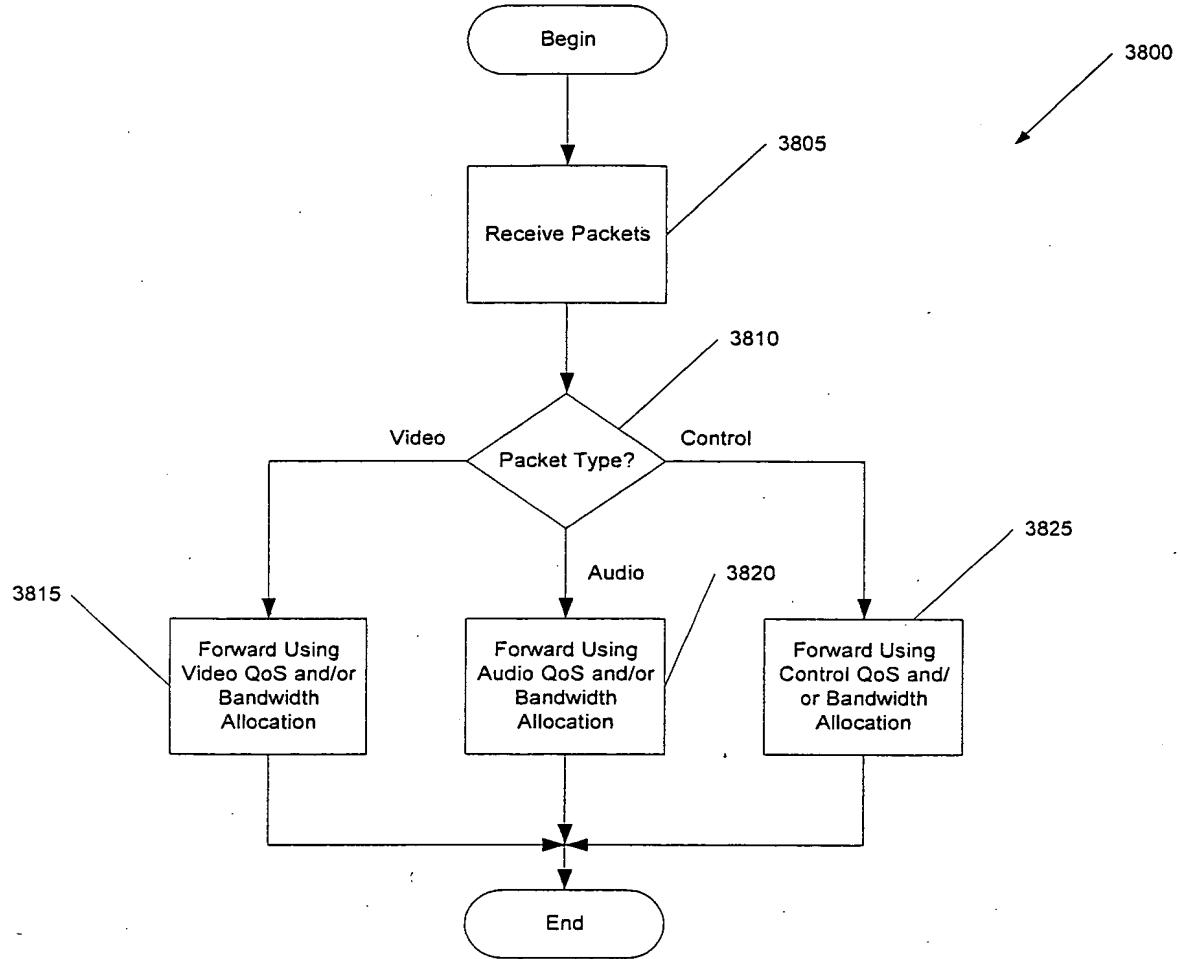


Figure 34

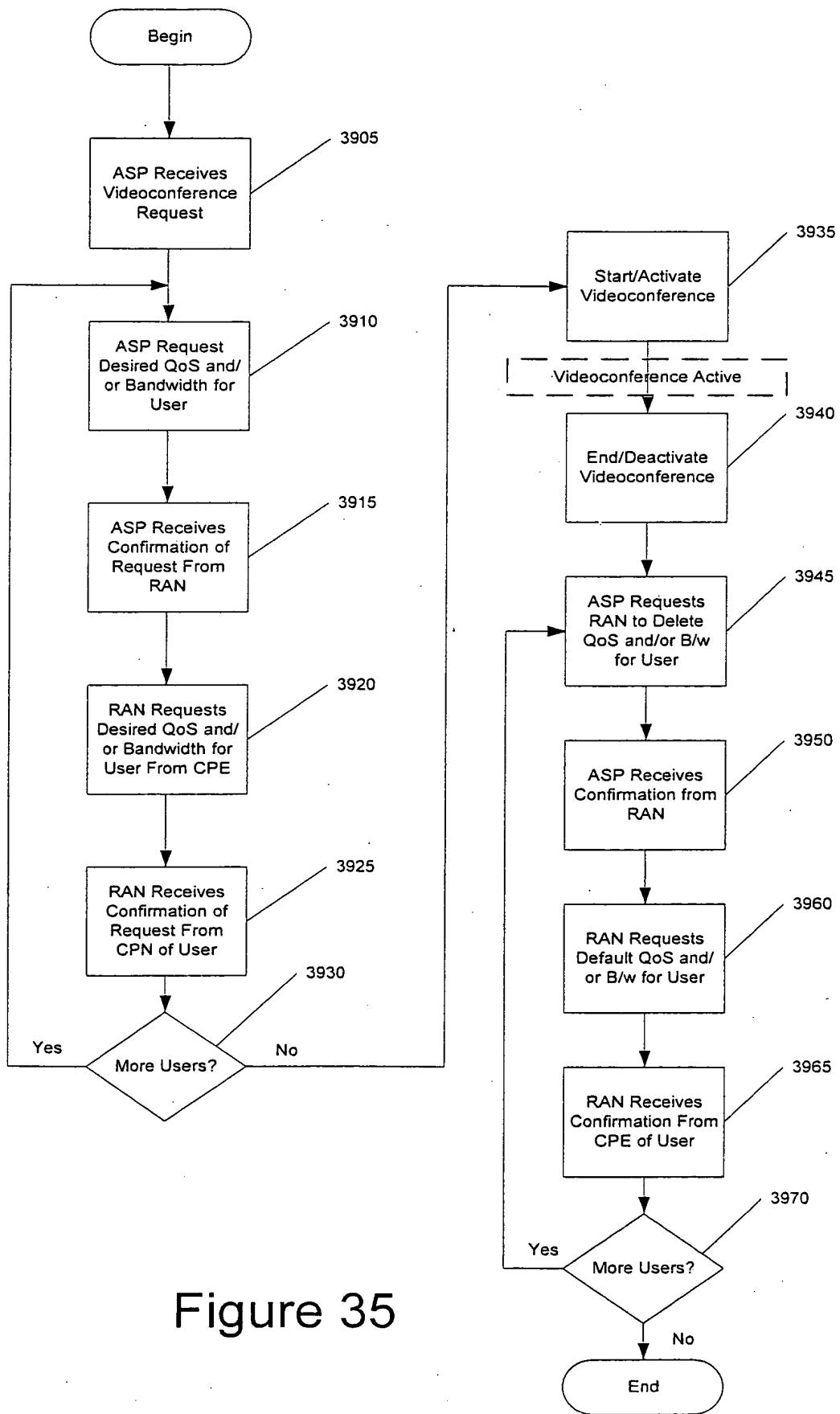


Figure 35

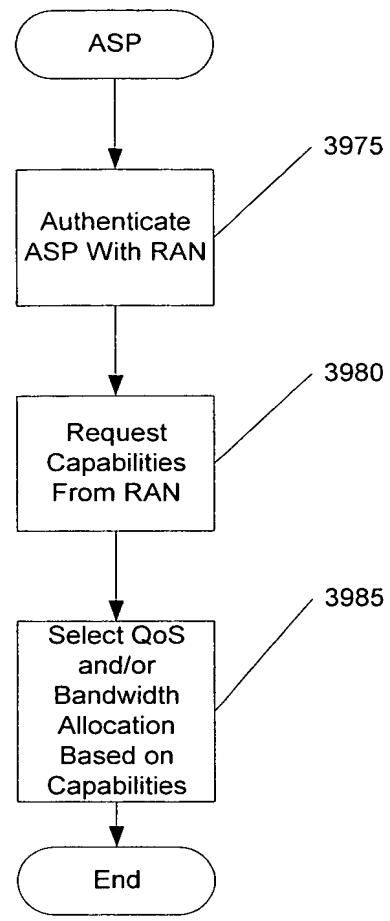


Figure 36